

INVITATION FOR BIDS



Howard County, Maryland
OFFICE OF PURCHASING
6751 Columbia Gateway Drive, Suite 501
Columbia, Maryland 21046

IFB No. 2016-18

**SEWER SYSTEM INSPECTION, CLEANING, AND
REHABILITATION SERVICES**

OPENING: SEPTEMBER 30, 2015 at 11:00 A.M.

PRE-BID CONFERENCE: SEPTEMBER 16, 2015 at 10:00 A.M.

BUYER: J. Nita Wenger
PHONE: 410-313-6519
EMAIL: jwenger@howardcountymd.gov



Formal IFBs and IFBs Results are available on the Website:
www.howardcountymd.gov/purchasing

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**IMPORTANT: ADVISE THE ISSUING OFFICE IMMEDIATELY
IF ANY OF THE ABOVE SECTIONS ARE NOT ENCLOSED IN THIS DOCUMENT.**

SECTION A

KEY INFORMATION SUMMARY

IFB Number:	IFB-2016-18
IFB Name:	Sewer System Inspection, Cleaning and Rehabilitation Services
Issue Date:	Friday, August 28, 2015
Buyer:	J. Nita Wenger jwenger@howardcountymd.gov 410-313-6519
Pre-Bid Date:	September 16, 2015 at 10:00 a.m.
Pre-Bid Location and Registration:	Department of Public Works, Bureau of Utilities 8270 Old Montgomery Rd. Columbia, MD 21045 Please register by contacting Rebecca Coleman at rcoleman@howardcountymd.gov
Questions Due and to Whom:	Questions due no later than 4:00 p.m. on September 24, 2015. Submit questions to: J. Nita Wenger at jwenger@howardcountymd.gov
Bid Due:	September 30, 2015 at 11:00 a.m.
Mail/Deliver Bids to the Issuing Office:	Office of Purchasing 6751 Columbia Gateway Dr., Ste. 501 Columbia, MD 21046 410-313-6370
Agreement Term:	One year with five, one-year renewals.
Bid Deposit/ Performance Bond:	Not Applicable
EBO Subcontracting Participation:	10% Goal

MINORITY BUSINESS ENTERPRISES are encouraged to respond to this solicitation. For more information, please contact Mr. Mahesh Sabnani, Equal Business Opportunity Coordinator, at 410-313-6370.

IMPORTANT NOTICE REGARDING ADDENDA

Addenda to solicitations often occur prior to bid opening. It is the potential Contractor's responsibility to visit the Office of Purchasing web site for updates to solicitations. www.howardcountymd.gov/purchasing

SECTION B

PURCHASE ORDER TERMS AND CONDITIONS

The following terms and conditions apply to all Purchase Orders issued by Howard County and are applicable to all purchases made as a result of this solicitation.

- 1 No purchase of materials, supplies, equipment, and/or services will be recognized unless made through the Office of Purchasing.
- 2 The County may at any time insist upon strict compliance with these terms and conditions, notwithstanding any previous custom, practice or course of dealing to the contrary.
- 3 The terms and conditions of sale as stated in this Purchase Order govern in the event of conflict with any terms of the Contractor's bid, and are not subject to change by reason of any written or verbal statements by the Contractor or by any terms stated in the Contractor's acknowledgement without prior written authority from the Office of Purchasing.
- 4 If the price is omitted on the Purchase Order, except where the Purchase Order is given in acceptance of quoted prices, it is agreed that Contractor's price will be the lowest prevailing market price and in no event is this Purchase Order to be filled at higher prices than last previously quoted or charged without prior written authority from the Office of Purchasing.
- 5 If requested, the Contractor shall acknowledge the order promptly and provide a delivery date.
- 6 Invoices must show Delivery Address and Purchase Order number, and indicate if it represents partial or complete billing. Separate invoices must be rendered for each Purchase Order. Invoices shall include the following information:
 - 6.1 Contractor's name;
 - 6.2 Address;
 - 6.3 Federal tax identification number;
 - 6.4 Contract number, if applicable (the first two digits are 44XXXXXXXX);
 - 6.5 Purchase Order number (the first digit is 2XXXXXXXX);
 - 6.6 Contract line number, if applicable;
 - 6.7 Unit price and extended price (if applicable, the unit price must match a line on the Contract); and
 - 6.8 Description of goods provided and/or services performed.
- 7 The County has the right to refuse to make payment on any invoice unless and until verification of receipt by the County can be determined. The County's payment for any material shall not constitute acceptance of the material or a waiver of any of the County's rights.
- 8 No freight/delivery/fuel charges will be paid by the County unless specifically provided for in the Purchase Order.
- 9 The County will not pay for packaging, boxing or cartage. Damage resulting from improperly packaged material will be charged to the Contractor.
- 10 The County reserves the right to cancel this Purchase Order or, any part thereof, without obligation, if delivery is not made or services completed at the time(s) specified.
- 11 This Purchase Order shall be governed and construed in accordance with the law of the State of Maryland without regard to any choice of law principles.
- 12 All deliveries and services furnished under this Purchase Order must be of the quality specified or in the event no quality is specified, must be the best of their respective kinds, and will be subject to inspection and approval of the County within a reasonable time after delivery of goods or completion of services. When manufacturing specifications are referred to in this Purchase Order, such specifications shall be deemed to be an integral part hereof as if duly set out herein. Goods and services shall be replaced at no additional charge to the County if they prove to be defective and/or not in accordance with specifications. Rejected materials shall be returned at the risk and expense of the Contractor. If the County does not desire replacement, the Contractor shall issue a full credit.
- 13 Requirement as to Materials, Contractor's Responsibilities and Warranties:
 - 13.1 The Contractor warrants and agrees that all materials supplied hereunder shall be manufactured and produced in compliance with the laws, regulations, codes, terms, standards and/or requirements of all Federal, State and local authorities and all other authorities having jurisdiction, and that performance of this Purchase Order shall be in accordance with the above laws, regulations, codes, terms, standards, and/or requirements, and agrees, upon request, to furnish the County a certificate of compliance in such forms as the County may require.
 - 13.2 The Contractor warrants that there has been no violation of copyrights or patent rights in manufacturing, producing, or selling the goods shipped or ordered and Contractor agrees to indemnify and hold the County harmless from any and all liability, loss or expense occasioned by such a violation.
- 14 The quantity of materials, and/or services, must not be exceeded without prior written authority from the Office of Purchasing.

- 15 Substitutions are not allowed without prior written authority from the Office of Purchasing.
- 16 If required, a sufficient number of shop drawings and/or catalog data shall be furnished to the County within 15 days (unless otherwise specified) for necessary approval.
- 17 In the event any article sold and delivered hereunder shall be defective in any respect whatsoever, the Contractor will indemnify and save harmless the County from all losses or expenses by reason of all accidents, injuries or damages to persons or property resulting from the use of such article or which are contributed to by said defective condition.
- 18 The Contractor shall indemnify and hold harmless the County, its employees, agents and officials from any and all claims, losses or expenses resulting from any accidents, injuries or damages to persons or properties, suits or demands including reasonable attorney fees which may be made against the County, its employees, agents or officials resulting from any act or omission committed in the performance of the duties imposed by and performed under the terms of this Purchase Order by the Contractor or anyone under agreement with the Contractor to perform duties under this Purchase Order. The Contractor shall not be responsible for acts of negligence or willful misconduct committed by the County, its employees, agents and officials. Any property or work to be provided by the Contractor under this Purchase Order will remain at the Contractor's risk until written acceptance by the County; and the Contractor will replace, at the Contractor's expense, all property or work damaged or destroyed by any cause whatsoever.
- 19 Liability for Damage: If this Purchase Order calls for work to be performed upon property owned or controlled by the County it is understood and agreed that:
 - 19.1 Mechanic's Liens: The Contractor will keep the premises and work free and clear of all mechanic's liens, and furnish the County certificate and waiver as provided by law.
 - 19.2 Property and Casualty Losses: The work will remain at the Contractor's risk prior to written acceptance by the County and the Contractor will replace at its own expense all work damaged or destroyed by fire, force or violence of the elements or any cause whatsoever.
 - 19.3 Injury to Contractor's Personnel: The Contractor understands and agrees that they are the sole employer of all persons employed by Contractor to perform services under this Purchase Order and agrees on behalf of itself and its workers' compensation insurer that the County is not a dual employer of such personnel. If Contractor is hiring independent contractors or subcontractors to perform services under this Purchase Order, Contractor shall assure that all such persons are properly covered under Maryland workers' compensation law and will indemnify, save harmless and defend the County from all workers' compensation claims filed by such persons against the County.
 - 19.4 Workers' Compensation Insurance: During the term of this Purchase Order, the Contractor will provide workers' compensation insurance in compliance with Maryland law for its employees and shall be responsible to verify workers' compensation coverage for all independent contractors and subcontractors. Contractor shall indemnify the County for any uninsured losses relating to contractual services under this Purchase Order and subsequent amendments.
- 20 Bankruptcy: In the event of any proceedings, voluntary or involuntary, in bankruptcy or insolvency by or against the Contractor including any proceedings under the Chandler Act, or in the event of the appointment, with or without the Contractor's consent, of an assignee for the benefit of creditors or of a receiver then the County shall be entitled to cancel any unfilled part of this Purchase Order without any liability whatsoever.
- 21 Equal Employment Opportunity: The County requires that the Contractor not discriminate against any employee or applicant for employment because of race, creed, religion, physical or mental handicap, color, sex, national origin, age, occupation, marital status, political expression, gender identity/expression, sexual orientation or personal appearance. The Contractor will take affirmative action to ensure that applicants are employed, and the employees are treated fairly and equally during employment with regard to the above. The Contractor warrants that, within the previous 12 months, it has not engaged in unlawful employment practices as set forth in Section 12.208 of the Howard County Code, Section 19 of Article 49B of the annotated Code of Maryland or Sections 703 and 704 of Title VII of the Civil Rights Act of 1964.
- 22 Material Safety Data Sheet (MSDS): If the work to be performed under this Purchase Order requires the use of any product that contains any ingredient that could be hazardous or injurious to a person's health, a MSDS must be provided to the Office of Purchasing, 6751 Columbia Gateway Drive, Suite 501, Columbia, Maryland 21046.
- 23 Termination
 - 23.1 Termination for Convenience: The County may terminate this Purchase Order, in whole or in part, if the County determines that such termination is in the best interest of the County, without showing cause, upon giving at least 30 days written notice to the Contractor. The County shall pay all reasonable costs incurred by the Contractor up to the date of termination. However, in no event shall the Contractor be paid an amount which exceeds the price bid for the work performed. The Contractor shall not be reimbursed for any profits which may have been anticipated but which have not been earned up to the date of termination.
 - 23.2 Termination for Default: When the Contractor has not performed or has unsatisfactorily performed one or more material terms of the Purchase Order, the County may terminate the Purchase Order for default. Upon termination for default, payment may be withheld at the discretion of the County. Failure on the part of the Contractor to fulfill the contractual obligations shall be considered just cause for termination of the Purchase Order. If the damages exceed the undisbursed sums available for compensation, the County shall not be obligated to make any further disbursements hereunder. The Contractor will be paid for work satisfactorily performed prior to termination less any excess costs incurred by the County in procuring and completing the work.

SECTION C

GENERAL CONDITIONS

1 DEFINITIONS:

- 1.1 Addenda – Formal alteration of a solicitation or Agreement in writing (When applicable, Addenda are available on the Office of Purchasing website.)
- 1.2 Alternate Bids – A second bid for a single item that intentionally offers a substitute product or service that varies from the stated specifications
- 1.3 Bid – All information submitted by the Contractor in response to this solicitation
- 1.4 Bidder – Any entity that submits a response to this solicitation
- 1.5 Buyer – The County’s Purchasing Representative for the resulting Agreement
- 1.6 Agreement – The Invitation For Bid documents and any addenda, the Contractor’s response to this solicitation, and subsequent Purchase Orders
- 1.7 County – Howard County, Maryland
- 1.8 County Purchasing Agent – The Chief Administrative Officer for the County
- 1.9 Contractor – Any bidder; most often the successful bidder
- 1.10 Designee – Specifically appointed alternate signatory or decision maker
- 1.11 Invitation For Bid (IFB) – All documents identified in the Table of Contents, including any addenda
- 1.12 Equal Business Opportunity (EBO) – The County’s minority business enterprise program
- 1.13 Issuing Office – The Howard County Office of Purchasing
- 1.14 Purchase Order – The document by which the Contractor receives formal notification to perform work or deliver goods
- 1.15 Solicitation – The Invitation For Bid
- 1.16 User Agency – County department or office for which goods and/or services are being purchased

2 BID DEPOSIT:

- 2.1 When deemed necessary, a bid deposit may be required. This requirement is described in Section E of this solicitation. Such bid deposits shall be in the amount deemed adequate by the County. The deposit shall be a certified check, cashier’s check, or treasurer’s check drawn upon a solvent clearing house bank, or a bid bond issued by an insurance company licensed to do business in Maryland made payable to Director of Finance, Howard County, Maryland. A combination of certified check and bid bonds is not an acceptable response to the bid deposit requirement.
- 2.2 Bid deposits in the form of certified checks will be returned to the unsuccessful bidders upon the award of the Agreement(s), and to the successful bidder(s) upon execution of the Agreement(s) and the meeting of bond requirements, if applicable.
- 2.3 The successful bidder's failure to execute the Agreement or meet bond requirements within ten working days after the award shall result in the deposit being forfeited to the County as liquidated damages.

3 RESERVATIONS:

- 3.1 The County reserves the right to reject any or all bids or parts of bids when, in the County Purchasing Agent's or Designee’s reasoned judgment, the public interest will be served thereby.
- 3.2 The County Purchasing Agent or Designee, with the approval of the County Executive, may waive formalities or technicalities in bids as the interest of the County may require.
- 3.3 The County Purchasing Agent or Designee reserves the right to increase or decrease the quantities to be purchased at the prices bid. The quantity intended to be purchased and the period and percentage amount of any such reservation will be stated in the solicitation.

- 3.4 The County Purchasing Agent or Designee reserves the right to award Agreements or place orders on a lump sum or individual item basis, or such combination as shall, in the County Purchasing Agent's or Designee's judgment, be in the best interest of the County.
- 3.5 The County Purchasing Agent or Designee may waive minor differences in specifications provided these differences do not violate the specification intent nor materially affect the operation for which the item or items are being purchased, nor increase estimated maintenance and repair cost to the County.
- 3.6 The County Purchasing Agent or Designee may reject any proposal which shows any omission, irregularity, alteration of forms, additions not called for, conditional or unconditional unresponsiveness, or proposals obviously unbalanced.

4 COMPETITION:

- 4.1 The name of any manufacturer, trade name, or manufacturer or vendor catalog number mentioned in this solicitation is for the purpose of designating a minimum standard of quality and type. Such references are not intended to be restrictive. Bids will be considered for any brand that meets or exceeds the quality of the specifications unless otherwise stated in the solicitation.
- 4.2 A Contractor may offer only one price on each item. Submission by a single Contractor of more than one price for a single item shall be sufficient cause for rejection of all prices for that item submitted by the Contractor. Alternate bids are prohibited and will be rejected.

- 5 UNBALANCED BIDS: A Bid shall be mathematically unbalanced if the Bid contains unit pricing that does not reflect reasonable costs (including actual labor and material cost, overhead and profit) for the performance of the bid item(s) in question. A bid shall be materially unbalanced if there is a reasonable doubt that award of the mathematically unbalanced Bid will result in the lowest ultimate cost to the County. A Bid that is, in the sole discretion of the County Purchasing Agent both mathematically and materially unbalanced, may be rejected as non-responsive.

(An example would be bidding overhead labor rates below regular time rates, or bidding laborer rates above Supervisor or Foreman rates. Another example is bidding a 1 gallon container of a product higher than a 5-gallon container of the same product.)

- 6 PERIOD OF VALIDITY: Unless otherwise specified, all formal bids submitted shall be irrevocable for 120 days following the bid opening date, unless the Contractor, upon request of the County Purchasing Agent or Designee, agrees to an extension. Bids may not be withdrawn during this period.

7 DELIVERY:

- 7.1 Contractors shall guarantee delivery of supplies in accordance with such delivery schedule as may be provided in the solicitation.
- 7.2 All items shall be delivered F.O.B. Destination, Inside Delivery, and delivery costs and charges included in the bid, unless otherwise stated in the solicitation.
- 7.3 The County Purchasing Agent or Designee reserves the right to charge the Contractor for each day the supplies or services are not delivered in accordance with the delivery schedule. The per diem charge may be invoked at the discretion of the County Purchasing Agent or Designee and said sum to be taken as liquidated damages and deducted from the final payment, or charged back to the Contractor.
- 7.4 The County Purchasing Agent or Designee reserves the right to procure the supplies/services elsewhere on the open market if delivery is not made as specified, in which event, the extra cost of procuring the supplies/services may be charged against the Contractor and deducted from any monies due or which may become due.

8 GOVERNING LAW:

8.1 This Agreement shall be governed by and construed in accordance with the laws of the State of Maryland without regard to any choice of law principles that would dictate the laws of any other jurisdiction. The parties agree that the exclusive venue for any and all actions related hereto shall be the appropriate Federal or State court located within the State of Maryland.

8.2 The laws of Maryland and Howard County shall govern the resolution of any issue arising in connection with the contract, including, but not limited to, all questions on the validity of the contract, the capacity of the parties to enter therein, any modification or amendment thereto, and the rights and obligations of the parties hereunder.

9 PROTEST: Any protest concerning the award of an Agreement shall be decided by the County. Protests shall be made in writing to the Issuing Office and shall be filed within ten days of issuance of award notification. A protest is considered filed when received by the Issuing Office. The written protest shall include the name and address of the protestor, identification of the procurement, a statement of the specific reason for the protest and supporting exhibits. The Issuing Office will respond to the written protest within ten days. The County's decision is final.

10 DISPUTES: In cases of disputes as to whether or not an item or service quoted or delivered meets specifications, the decision of the County Purchasing Agent or Designee shall be final and binding on all parties. All other disputes arising under or related to the Agreement will be resolved, to the extent possible, by negotiation and settlement between the parties. Pending resolution, the Contractor shall proceed diligently with performance of the Agreement unless otherwise directed in writing.

11 AUTHORITY: Solicitations are issued pursuant and subject to the provisions of Article VIII, Howard County Charter; Sections 4.100 through 4.123, Howard County Code, 2003; and the rules and regulations as prescribed by the County.

12 CASH DISCOUNTS: If applicable, cash discounts will be taken into consideration in determining the award. However, an offer of a cash discount must allow a reasonable period of not less than 30 days in order to be included in evaluation of bid pricing. A bid offering a cash discount in a period of less than 30 days will be evaluated as a bid without a cash discount offer. If the Contractor obtains an award by reason of their gross price, the County will hold the offer of a cash discount and make every effort to obtain such discount.

13 UNIT PRICES: Unless the Contractor clearly shows that it is the intent that a reduced total price is being offered on the basis of receiving an award of all items covered by the total, any totals should be the actual sum of the extension of unit prices. Otherwise, in the event of any discrepancy between a unit price(s), extended price(s), and/or total price(s), unit prices will govern and the bid will be refigured accordingly.

14 NON-WAIVER: Any waiver of any breach of covenants herein contained to be kept and performed by the Contractor shall not be deemed or considered as a continuing waiver and shall not operate to bar or prevent the County from declaring a forfeiture for any succeeding breach either of the same condition of covenant or otherwise.

15 PATENTS: If applicable, the Contractor shall defend any suit or proceeding brought against the County so far as based on a claim on any equipment, or on any part thereof, furnished under this Agreement which constitutes an infringement of any patent of the United States, if notified promptly in writing and given authority, information and assistance (at the Contractor's expense) for the defense of same, and the Contractor shall pay all damages and costs awarded therein against the County. In case said equipment or any part thereof, in such suit is held to constitute infringement and the use of said equipment or part if enjoined, the Contractor shall, at its own expense, either procure for the County the right to continue using said equipment or part, or replace same with non-infringing equipment or part, or modify so that it becomes non-infringing.

16 MARYLAND REGISTRATION: Contractors must be registered to do business in, and must be in good standing in, the State of Maryland. Contractors not registered must obtain registration information from the

Maryland Department of Assessments and Taxation website at: www.dat.state.md.us/ or by calling 410-767-1184 or Toll Free 888-246-5941.

- 17 **AVAILABILITY OF FUNDS:** The contractual obligation of the County under this Agreement is contingent upon the availability of appropriated funds from which payment for this Agreement can be made.
- 18 **INTEGRATION AND MODIFICATION:** This solicitation, the Contractor's response to this solicitation, subsequent Purchase Order(s), and, if applicable, the legal Agreement represents the entire understanding between the parties. Any additions or modifications shall only be made in writing and executed by both parties.
- 19 **NON-ASSIGNMENT OF AGREEMENT:** Neither the County nor the Contractor shall assign, sublet or transfer its interest or obligations under the resulting Agreement to any third party, without the written consent of the other. Nothing herein shall be construed to create any personal or individual liability upon any employee, officer or elected official of the County, nor shall the resulting Agreement be construed to create any rights hereunder in any person or entity other than the parties to this Agreement.
- 20 **AGREEMENT:**
- 20.1 The County and Contractor must execute an Agreement resulting from the award of this solicitation. This process typically takes approximately three weeks from the date the successful Contractor is identified. In order to expedite this process, a sample standard Agreement is attached for review as part of this solicitation. Exceptions, if any, to the County's standard Agreement, Exhibit I, must be noted in the bid to be considered during evaluation. Exceptions to the County's standard Agreement may result in rejection of the bid.
- 20.2 Do not fill in or sign the sample Agreement attached as Exhibit I. The County will prepare an Agreement specific to this solicitation for execution by the successful Contractor.
- 21 **COOPERATIVE PURCHASE:**
- 21.1 The County reserves the right to extend all of the terms, conditions, specifications, and unit or other prices of any Agreement resulting from this solicitation to any and all public bodies, subdivisions, schools districts, community colleges, colleges, and universities including non-public schools. This is conditioned upon mutual agreement of all parties pursuant to special requirements, which may be appended thereto. The Contractor agrees to notify the issuing body of those entities that wish to use any Agreement resulting from this solicitation and will also provide usage information, which may be requested.
- 21.2 The County assumes no authority, liability or obligation, on behalf of any other public or non-public entity that may use any Agreement resulting from this solicitation. All purchases and payment transactions will be made directly between the Contractor and the requesting entity. Any exceptions to this requirement must be specifically noted in the bid response.
- 22 **ENVIRONMENTALLY PREFERABLE PRODUCTS:** The County shall give a percentage price preference not exceeding 5% for the purchase of environmentally preferable products. The percentage price preference will not apply if doing so will cause a denial of Federal or State funding or is inconsistent with Federal or State law.
- 23 **AWARD NOTIFICATION:**
- 23.1 Award notification will be by U.S. Mail, e-mail or fax or a combination thereof.
- 23.2 The awarded Contractor(s) will be required to return an Insurance Certificate naming "Howard County, Maryland, its officials, employees, agents and volunteers" as Certificate Holder and as Additional Insured, the executed Agreement* the completed EBO Schedule of Participation and the Maryland Registration Certificate of Good Standing.

*** As Offerors have had an opportunity to note Exceptions to the Agreement with their bid submission, it is anticipated that execution of the Agreement will require minimal time. PLEASE BE SURE TO READ THE SAMPLE AGREEMENT, EXHIBIT I. PRIOR TO SUBMISSION OF YOUR BID.**

24 TERMINATION:

- 24.1 Termination for Convenience: The County may terminate this contract, in whole or in part, if the County determines that such termination is in the best interest of the County, without showing cause, upon giving at least 30 days written notice to the Contractor. The County shall pay all reasonable costs incurred by the Contractor up to the date of termination. However, in no event shall the Contractor be paid an amount which exceeds the price bid for the work performed. The Contractor shall not be reimbursed for any profits which may have been anticipated but which have not been earned up to the date of termination.
- 24.2 Termination for Default: When the Contractor has not performed or has unsatisfactorily performed one or more material terms of the contract, the County may terminate the Purchase Order for default. Upon termination for default, payment may be withheld at the discretion of the County. Failure on the part of the Contractor to fulfill the contractual obligations shall be considered just cause for termination of the contract. If the damages exceed the undisbursed sums available for compensation, the County shall not be obligated to make any further disbursements hereunder. The Contractor will be paid for work satisfactorily performed prior to termination less any excess costs incurred by the County in reprocurring and completing the work.

SECTION D

SPECIFICATIONS

- 1 SCOPE: Howard County, Maryland, (the “County”), seeks a qualified Contractor (the “Contractor”), to furnish sewer system inspection, cleaning, and rehabilitation services on an as needed basis.
- 2 PRE-BID CONFERENCE:
 - 2.1 A pre-bid conference will be held at Howard County Department of Public Works, Bureau of Utilities at 8270 Old Montgomery Road, Columbia, Maryland 21045 on the date and time specified in Section A to discuss objectives and answer questions relating to this solicitation. Contractor’s attendance is not required but is strongly encouraged. Additionally, attendance may facilitate the Contractor’s understanding and ability to meet the County’s Equal Business Opportunity goals as outlined in Section I.
 - 2.2 It is recommended that Contractors read the solicitation prior to attending the conference and bring a copy to the conference.
 - 2.3 In order to assure adequate seating at the pre-bid conference, please confirm attendance by emailing Rebecca Coleman at rcoleman@howardcountymd.gov and referencing this solicitation and number.
 - 2.4 If there is a need for language interpretation and/or other special accommodations, please advise Rebecca Coleman at rcoleman@howardcountymd.gov so that reasonable efforts may be made to provide special accommodations.
- 3 SITE VISIT: Each Contractor must completely satisfy themselves as to the exact nature and existing conditions of the site areas and requirements of the specifications for extent and quality of work to be performed. Failure to do so will not relieve the Contractor of their obligation to carry out the provisions of the contract.
- 4 INQUIRIES AND ADDENDA:
 - 4.1 The Buyer in the Issuing Office is the sole point of contact for this solicitation. Questions must be addressed in writing to the Buyer and received by the question deadline listed in Section A.
 - 4.2 Addenda to solicitations often occur prior to bid opening, sometimes within a few hours of the opening. It is the potential Contractor’s responsibility to visit the Office of Purchasing website at www.howardcountymd.gov/purchasing to obtain Addenda. Addenda, when issued, must be acknowledged in the bid by signing and returning all addenda with the bid. Addenda must also be acknowledged in the space provided in Section F, Price Page.
- 5 CONTRACTOR’S QUALIFICATIONS:
 - 5.1 Contractors must be engaged in the sanitary sewer system investigation, rehabilitation, and repair field and must have been actively engaged in the sanitary sewer system investigation, rehabilitation, and repair for a period of no less than five years. The experience of owner(s) may be imputed to a newly formed company/contractor provided the owner(s) has/have at least five years of demonstrated experience of reliability and meets the criteria set forth herein.
 - 5.2 The County reserves the right to inspect the Contractor's equipment and to perform such investigations as may be deemed necessary to insure that competent personnel and management will be utilized in the performance of the Agreement.
 - 5.3 In accordance with Howard County Code Sec. 4.117 (a) (4), the quality of performance of previous contracts or services shall be considered in determining the lowest responsive and

responsible bidder. Quality of performance may be determined through contracts or services provided to the County or to other entities. Quality of performance to other entities will be determined from reference checks when references are required. The determination of quality performance includes the Contractor's history of reasonable and cooperative behavior and commitment to customer satisfaction and the Contractor's businesslike concern for the interests of the customer. The County reserves the right to reject any bid deemed not responsible or non-responsive.

- 5.4 Contractors shall have "in-house" capability, including equipment and personnel, to perform flow monitoring, television inspection services on 4" through 48" sewer mains (including house laterals), chemical sealing (grouting) of both mains and laterals, internal pipe sleeving (point repairs) of mains and laterals, smoke testing, lateral cleanout, and manhole repairs. The pipeline materials may include reinforced and non-reinforced concrete, polyvinyl chloride (PVC), high density polyethylene, ductile or cast iron, asbestos cement, or clay pipe. The Contractor shall provide evidence of these "in-house" capabilities with their bid, and any portion of the proposed work they intend to subcontract for shall be clearly defined.
- 5.5 Contractors shall submit resumes of their key employees with whom they intend to staff this project. Resumes shall reflect the competency of the key employees, noting past experience of similar scope and complexity.
- 5.6 Contractors shall certify compliance with *20 CFR 1910.146* (OSHA confined space safety regulations) and all safety requirements involved with the project. The Contractor shall submit a copy of their confined space entry procedures and safety procedures.
- 6 AGREEMENT PERIOD: The Agreement period shall be for one year commencing on or about October 1, 2015 with a renewal option for five additional years in one-year increments, exercisable at the sole discretion of the County Purchasing Agent or Designee.
- 7 PRICE ADJUSTMENT:
 - 7.1 Prices offered shall be firm against any increase for one year from the effective date of the Agreement. Prior to the commencement of subsequent renewal periods, it shall be the Contractor's responsibility to notify the Issuing Office in advance of any requested price changes.
 - 7.2 Requests for price adjustments must be submitted to the Issuing Office, not the User Agency.
 - 7.3 The County will entertain requests for escalation in accordance with the current Consumer Price Index at the time of the request or up to a maximum 5% increase on the current pricing, whichever is lower. *(For purposes of this section, "Consumer Price Index" shall be the Consumer Price Index-All Urban Consumers (CPI-U), Washington-Baltimore, DC-MD-VA-WV, All Items, Not Seasonally Adjusted, as published by the United States Department of Labor, Bureau of Labor Statistics.)* The County reserves the right to grant or deny the request for a price increase and will do so in writing. If the price increase is approved, the price increase will be effective upon written approval and will remain firm through the renewal period.
 - 7.4 If a price increase is requested following Agreement renewal and it has been longer than one year since the last increase, the County may entertain a request for escalation if it is in the County's best interest. If the price increase is granted, the price increase will be effective upon approval and will remain firm through the renewal period, or for one year, at the County's sole discretion.
- 8 NON-EXCLUSIVITY: Nothing herein is intended nor shall be construed as creating any exclusive arrangement with Contractor. This Contract shall not restrict the County from acquiring similar, equal or like goods and/or services from other entities or sources.
- 9 ESTIMATED QUANTITIES: The estimated annual quantities stated are provided as a general guide for bidding and are not guaranteed. Actual quantities may be more or less than those estimated. The County reserves the right to add and delete items as necessary.

- 10 **INSURANCE:** The Contractor will be required to purchase and maintain during the life of the Agreement, including any subsequent renewal terms, Commercial General Liability Insurance, Automobile Liability Insurance, and Worker's Compensation Insurance with limits of not less than those set forth below:
 - 10.1 Commercial General Liability Insurance: Combined Single Liability limits of \$1,000,000 each occurrence and \$1,000,000 aggregate naming "Howard County, Maryland, its officials, employees, agents and volunteers" as Certificate Holder and as Additional Insured.
 - 10.2 Automobile Liability Insurance: Combined Single Liability limit of \$1,000,000 any one accident.
 - 10.3 Worker's Compensation Insurance: Statutory coverage for Maryland jurisdiction, including Employer's Liability coverage, with a limit of at least \$100,000.
 - 10.4 The Contractor shall assure that all subcontractors or independent contractors performing services in accordance with this solicitation carry identical insurance coverage as required of the Contractor, either individually or as an Additional Insured on the policies of the Contractor. Exceptions may be made only with the approval of the County. The Contractor shall indemnify the County for any uninsured losses relating to contractual services involving subcontractors, including workers' compensation claims.
 - 10.5 The Contractor shall provide the County with Certificates of Insurance within ten days of bid award notification, evidencing the coverages required above. Such certificates shall provide that the County be given at least 60 days prior written notice of any cancellation of, intention to not renew, or material change in such coverage. The Contractor must provide Certificates of Insurance before commencing work in connection with the Agreement. "Howard County, Maryland, its officials, employees, agents and volunteers" must be shown as the Certificate Holder and an Additional Insured on the certificate.
 - 10.6 The providing of any insurance required herein does not relieve the Contractor of any of the responsibilities or obligations assumed by the Contractor in the Agreement awarded or for which the Contractor may be liable by law or otherwise.
 - 10.7 Failure to provide and continue to enforce such insurance as required above shall be deemed a material breach of the Agreement and shall operate as an immediate termination thereof.
 - 10.8 Failure to comply with this requirement at any time during the initial term and any subsequent renewals may be sufficient cause for termination for default. A violation of this law is a Class A civil offense and, in addition to a fine, the County Purchasing Agent may suspend or debar the violator under Sec. 4.117.
- 11 **METHOD OF ORDERING:**
 - 11.1 Purchase Orders will be issued from time to time for such quantities as may be required by the County. Purchase Orders issued against the Agreement, even if not completed within the term of the Agreement, shall continue to be bound by the terms and conditions until completion.
 - 11.2 Small purchases may also be made by the County's procurement card (currently Visa). The Contractor agrees to accept the card for such quantities as may be required by the County. Contractors are prohibited from charging additional fees over and above their bid prices to process payments on procurement cards.
- 12 **METHOD OF AWARD:**
 - 12.1 The County intends to make awards to one or more primary Contractors for the same line items, effectively to the lowest responsive and responsible Contractors. The estimated annual quantities on the Price Sheet represent the total volume of work for all Contractors combined.

- 12.2 The assignment of work shall be at the sole discretion of the County. The Contractor(s) shall waive any claim of either Contractor against the County for extra compensation or damages arising out of assignment of work by the County.

If only one bid is received, the County reserves the right to award a single Contractor if it is in the best interest of the County.

13 BILLING AND PAYMENT:

- 13.1 The Contractor shall submit separate invoices in triplicate for each Purchase Order issued. Invoices shall be sent to Bureau of Utilities, 8270 Old Montgomery Road, Columbia, Maryland 21045. Invoices in the proper form and approved by the County shall be paid by the County within 30 days of receipt. Invoices without the necessary information may be returned for correction prior to payment.

- 13.2 Each invoice shall include the following information:

- 13.2.1 Contractor's name;
- 13.2.2 Address;
- 13.2.3 Federal tax identification number;
- 13.2.4 Contract number, if applicable (i.e., 44XXXXXXXXX);
- 13.2.5 Purchase Order number (i.e., 2XXXXXXXXXX);
- 13.2.6 Contract line number;
- 13.2.7 Unit price and extended price (unit price must match a contract line); and
- 13.2.8 Description of goods provided and/or services performed.

- 13.3 The County reserves the right to make payments on Visa procurement cards when orders are placed using procurement cards as indicated in Method of Ordering above. Contractors are not permitted to charge the County additional fees over and above their bid prices to process payments on procurement cards.

- 13.4 The County reserves the right to make payments via electronic funds transfer (a.k.a. ACH) on Agreements for which this is appropriate.

- 13.5 Delivery tickets signed by authorized County personnel shall accompany invoice.

- 13.6 Payment shall be made after delivery and upon receipt of proper invoice from Contractor and authorized by the head of the department or their designee.

- 13.7 All amounts, costs, or prices referred to herein pursuant to this Agreement shall be United States of America currency.

- 13.8 Please provide a sample invoice that complies with paragraph "Billing and Payment" with response. See Exhibit II for sample invoice.

- 13.9 The proper form of County invoices requires that the necessary information be included on all invoices. Invoices without the necessary information may be returned for correction prior to payment. The County reserves the right to approve invoices, in its sole discretion, and to request such detail and additional information as the County, in its discretion deems appropriate.

14 WARRANTY:

- 14.1 The Contractor warrants the services and repairs furnished to be of the highest quality, complying with the specifications and free from all defects whatsoever in workmanship and materials, for a period of one year from the date of delivery. Replacements and repairs under this warranty are to be made by the Contractor at no cost and to the satisfaction of the County.

- 14.2 The material supplied by the Contractor shall carry the manufacturer's standard new material warranty.

- 15 PROJECT MANAGER: After award, coordination will be with Anthony J. Rocco, Project Manager
- 16 INFORMATION PROVIDED BY THE COUNTY: The County through its Bureau of Utilities shall provide construction plans to the Contractor. The plans shall be to the County standards and shall have both a plan and profile view of all public sewers and manholes requiring inspection and rehabilitation. The Howard County Bureau of Utilities shall also provide a copy of the Capacity, Management, Maintenance and Operations Manual for reference by the Contractor.
- 17 SERVICES/RESPONSE:
 - 17.1 The Contractor shall begin work within two weeks of written request by the County. The request shall be in the form of a letter from the Project Manager informing the Contractor of the required work.
 - 17.2 The Contractor shall perform continuous work on this project and any interruptions shall be approved by the Project Manager in advance. In the event the Contractor experiences technical difficulties and that delay is not approved by the Project Manager, the County reserves the right to finish the work at its discretion using the remaining funds designated to the project
- 18 MANPOWER/SAFETY REQUIREMENTS:
 - 18.1 The Contractor shall provide all labor, materials, and equipment necessary to perform the sanitary sewer system inspection, rehabilitation, and repair as described in these specifications. The County may, at the discretion of the County, accompany the Contractor to assure that the work is being performed to its satisfaction
 - 18.2 The Contractor shall adhere to all safety requirements, as observed by the Howard County Department of Public Works, with particular attention to the confined space entry and roadwork. The Contractor shall be responsible for the safe conduct of all personnel included in their installation/maintenance team.
- 19 TECHNICAL SPECIFICATIONS:
 - 19.1 Sewer System Investigations:
 - 19.1.1 The Contractor shall provide all necessary personnel and equipment to perform various sewer system investigations and inspections, under the direction of the Project Manager (hereafter called the “PM”), within selected drainage areas of the sanitary sewer collection system for the purposes of 1) identifying and eliminating Infiltration/Inflow (I/I), 2) identify damaged/defective sewer mains, connections, and manholes and 3) develop a plan to make the necessary repairs to the sanitary sewer. Investigations will be executed and performed based upon issuance of work orders from the PM. Investigations will include flow monitoring, televised sewer inspections, smoke testing, and visual manhole inspections. Available mapping and other pertinent documentation will be reviewed and provided to contractor. An established work plan will be finalized by the PM in conjunction with the contractor for field activities. Reports shall be provided by the Contractor which document the findings and suggested methods of repair.
 - 19.1.2 A physical inspection survey will be conducted to identify potential sources of I/I and extraneous flow. The survey will be conducted during optimum groundwater conditions when I/I is suspected of being present. The Contractor shall mobilize within a 48 hour period upon receiving notification from the County that sewer flows have significantly increased and conditions are ideal for investigation.
 - 19.1.3 Field personnel shall observe the flows in key manholes to identify sewer sections that appear to be conveying excessive flow. When a sewer section(s) are identified as having extraneous flows, the upstream manhole shall be plugged and, by means of a volumetric

weir placed in the downstream manhole, the flow shall be measured. The findings shall then be recorded onto a standardized field form.

- 19.1.4 Televised Sewer Inspections: The work under this item shall consist of furnishing all equipment, labor and material necessary for the investigation of pipelines by the use of Closed Circuit Television to determine the condition of the line or any other data, such as infiltration, etc. at locations shown on the Contract Drawings, specified elsewhere or ordered by the County and in accordance with these specifications.

- 19.1.4.1 The color television camera used for the inspection shall be a pan-and-tilt radial viewing pipe inspection camera that pans at least 275 degrees and rotates 360 degrees and is specifically designed and constructed for pipeline inspection. The camera shall have its own lighting system which shall produce light levels to allow a clean picture of the entire periphery of the pipe. The camera shall be operative in 100% humidity conditions. The camera must contain an accurate footage counter which displays on the monitor the exact distance of the camera with an accurate centerline of the starting manhole. The camera, television monitor, and other components of the video system shall be capable of producing picture quality to the satisfaction of the County; and if unsatisfactory, equipment shall be removed and replaced with adequate equipment. No payment will be made for an unsatisfactory inspection.

- 19.1.4.2 Following cleaning, the sewers will be internally televised and video-recorded to confirm cleanliness, document existing conditions and observed pipe defects and abnormalities. The sewers will be inspected when flow conditions are optimal with respect to suspected I/I influence. Standard equipment to include self-propelled pan and tilt cameras with capabilities to televise up to 1,000 lineal feet maximum from access points. If an obstruction is encountered during an inspection, the set-up will be reversed in an attempt to complete the inspection in its entirety. Certain sewer sections will be identified for television inspection from the Physical Survey/Flow Isolation task, and will be based on criteria as established and agreed upon by the County and the Contractor. High quality inspection equipment with pan and tilt capabilities will be utilized.

- 19.1.4.3 The color camera shall be moved through the line in either direction at moderate rate, stopping when necessary to permit proper documentation of the sewer's condition. In no case will the television camera be pulled at a speed greater than 15 feet per minute. Manual winches, power winches, TV cable, and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions shall be used to move the camera through the sewer line. If, during the inspection operation, the television camera will not pass through the entire manhole section, the Contractor shall set up his equipment so that the inspection can be performed from the opposite manhole. If, again, the camera fails to pass through the entire manhole section, the inspection shall be considered complete and no additional inspection will be required.

- 19.1.4.4 Documentation of the television results shall be as follows – all documentation will be provided in accordance with NASSCO PACP Standards. Field personnel shall record and document the internal inspections on WinCan V-8 software or County approved equal. The following sewer system conditions shall be documented:

- 19.1.4.4.1 All service connection locations, leaking or defective service connections.

- 19.1.4.4.2 Visible mainline pipe structural defects.

- 19.1.4.4.3 Abnormal joint conditions, such as evidence of or active leakage, wide, open or offset joints, and other conditions such as horizontal and vertical misalignments.
 - 19.1.4.4.4 Mainline cracks, fractures, broken pipe, holes in pipe, etc. Any other adverse conditions and observations in the piping.
 - 19.1.4.4.5 Manhole identification and continuous distance from manhole.
 - 19.1.4.4.6 Adverse slope conditions such as reverse or sag conditions.
 - 19.1.4.4.7 Service Connections, including confirmed or suspected source ID.
 - 19.1.4.4.8 Visible structural defects, including broken, collapsed, and deteriorated pipe.
 - 19.1.4.4.9 Abnormal joint conditions, such as horizontal and vertical misalignments and open joints.
 - 19.1.4.4.10 Other adverse conditions, such as root penetration, protruding pipes, in-line pipe size changes, mineral and grade deposits, and obstructions.
 - 19.1.4.4.11 Estimate the flow coming from each observed extraneous flow source. Pan and Tilt viewing and recording of any defects and/or service connections shall be utilized to further enhance the inspection.
- 19.1.4.5 Videotape Recordings: The Contractor shall furnish all equipment for color video tape recordings. All sewer inspections shall be recorded on DVD for future reference. The recording shall be on high quality DVD as manufactured by 3M, BASF, or County approved equal, Digital Photographs. Noted defects shall be documented as digital files and hard copy printouts. The Contractor shall submit copies of the Inspection Logs and the Videotape Recordings to the Project Manager, and shall become the property of the County. Electronic and printed "Television Inspection Summary" including at a minimum the following fields:
- 19.1.4.5.1 Upstream and Downstream Manhole ID
 - 19.1.4.5.2 Upstream and Downstream Manhole Depth
 - 19.1.4.5.3 Type and Dimensions of Sewer Run
 - 19.1.4.5.4 Material and Length of Sewer Run
 - 19.1.4.5.5 Defects and Observations noted during the television inspections
 - 19.1.4.5.6 Recommendations with accompanying cost estimates, electronic and printed "Table of Connections", for all service connections, will be provided including at a minimum the following fields:
 - 19.1.4.5.7 Upstream and Downstream Manhole ID
 - 19.1.4.5.8 Distance from Upstream Manhole
 - 19.1.4.5.9 Location of Connection (clock position)

19.1.4.5.10 Source ID, Confirmed or Suspected (i.e. street address or inlet location)

19.1.4.5.11 Number of Confirmed or Suspected Downspouts Discharging to Sewer

19.1.4.5.12 Recommendations with accompanying cost estimates

19.1.4.6 Internal Television Inspection of Laterals: Using specialized remote launching equipment, lateral sewers will be internally inspected. Access will be obtained from the mainline sewer. During the television inspection, field personnel will perform the same functions as for the mainline inspections described above. A compiled list of suspect lateral sewer connections shall be prepared by the contractor based upon their review of CCTV inspections of the mainline sanitary sewers, specifically evidenced by either active or suspect leakage, staining, or related conditions and observations. Laterals shall be internally televised by means of launching a lateral camera from our mainline camera setup. This type of inspection requires no cleanout access or excavation. The lateral camera is launched into the lateral connection at the mainline remotely, and traverses up the lateral pipe. The video recording and inspection report is otherwise quite similar to our traditional mainline video and inspection report. The maximum total length of lateral pipe that can be televised from this setup is 80 feet; however the actual length televised is dependent on pipe alignment, pipe size reduction, and other physical limitations in the pipe. The lateral pipe is to be inspected to the right-of-way / property line.

19.1.5 Manhole Inspections:

19.1.5.1 Manholes shall be visibly inspected from the topside. Topside manhole inspections will be performed on all accessible manholes that are authorized by the County. Minimally, all manholes associated with any sewers that are televised will be inspected.

19.1.5.2 Field personnel shall examine and document the visible structural condition of manholes and inspect the manholes for evidence of leaks, surface runoff entry, and other visible defects. They shall also examine and document any influent connections and take digital photographs of significant defects. All findings shall be recorded onto a standardized form that includes:

19.1.5.2.1 Manhole Identification (County Contract and MH Number), Location, Date of Inspection, Manhole Type, and Overall Condition.

19.1.5.2.2 Type and Condition of Frame, Riser, Cone and Walls, Steps, Bench, and Channel.

19.1.5.2.3 Any Leakage or Suspect Leakage Sources.

19.1.5.2.4 Surcharging or evidence of surcharging.

19.1.5.2.5 Indication that manhole accepts surface water.

19.1.5.2.6 Indicate all pipes entering and exiting the manhole, including clock positions.

19.1.5.2.7 Structural defects, evidence of hydrogen sulfide corrosion, or other visible defects.

19.1.5.2.8 Other adverse conditions, such as root penetration, protruding pipes, mineral and grease deposits, and any type of obstructions.

19.1.5.2.9 Any other noteworthy conditions.

19.1.5.3 Defects and all findings of each manhole inspection will be recorded onto a standardized form. Digital photographs of significant defects shall also be provided in both electronic and hard color copy format. Upon completion of the field work, field forms, photographs, and documentation will be organized in an appropriate report format. The findings will also be summarized in approved digital spread sheet format. Included shall be recommendations with cost estimates.

19.1.6 Smoke Testing: This method will be performed to detect and document extraneous flow sources within the mainline and lateral sewers. Testing will be conducted during dry weather and unfrozen ground conditions. An experienced test crew and required equipment and materials will be provided. Smoke testing will be used to check drainage appurtenances and other sources suspected of being connected to a particular sewer section. The presence of smoke verifies the source connected to the test sanitary sewer.

19.1.6.1 Liquid smoke fluids only shall be used. Smoke bombs or candles will not be allowed. The smoke fluid shall produce smoke when exposed to the heat of the exhaust system of the motor for the blower. The smoke generated shall be white to gray smoke, leaving no residue, and shall be non-toxic and non-explosive.

19.1.6.2 The Contractor shall provide a portable blower designed and built specifically for the use of smoke testing. The blower shall be self-contained and powered by a minimum three horsepower (HP) gasoline engine and be capable of producing a minimum of 2,000 cubic feet of air per minute when working as a blow-in ventilator and 4,000 cfm when working as a suction ventilator.

19.1.6.3 The base of the blower shall have appropriate adapters and seals to make a good connection to the manhole without excessive loss of air and smoke.

19.1.6.4 In addition to the blower, the Contractor shall provide all other equipment, tools, and incidentals required to perform smoke testing as required by these specifications and as directed by the County, including, but not limited to, sewer line stoppers, sand bags, cameras, confined space entry equipment, etc.

19.1.6.5 Pre-Notifications: With the first notification, the Contractor shall notify all affected residents in the County that smoke testing will occur no more than two weeks prior and not less than one week prior to the date of testing. This notification will be by using a printed flyer hung on each door of affected homeowners and/or a press release in the local newspaper. The flyer and/or press release notice shall include:

19.1.6.5.1 Contact numbers for the Contractor and the County, if residents want additional information. All persons who will be in contact with the public should be well versed in the smoke testing procedures, work schedule, and content of all public notices.

19.1.6.5.2 Warnings to the homeowner that individuals who are immobile with respiratory, heart problems, or others who should never be exposed to smoke, should be removed from the premises prior to the tests. The notice should also request that homes with these individuals be requested to be registered as "Homes of Special Concern".

19.1.6.5.3 The Contractor shall notify the local Police and Fire Departments, the County, the County Department of Health, and the State Department of Environmental Protection, just prior to distributing the flyers and publishing the Press Release to the general public.

19.1.6.5.4 The work schedule shall be submitted for review and approval by the County. If the Contractor wishes to test before 8:00 a.m., such testing shall be shown on the submitted Work Schedule. Smoke testing shall not be performed on weekends or on holidays without the prior approval of the County. The Contractor shall not perform smoke testing on days that, in the opinion of the County, will hinder the results of the test (for example, when high winds, heavy rains, or excessively high groundwater levels would interfere with the effectiveness of the testing).

19.1.6.6 Daily Notifications: In the area of daily testing, the Contractor shall notify:

19.1.6.6.1 All providers of emergency services by telephone providing the area to be tested during the next day of work. Notification shall be 24 hours in advance of the testing.

19.1.6.6.2 The Contractor shall notify, by hand delivery of a notification letter, door knob hangtags or other acceptable methods, to each address, all residences, and businesses in the area to be tested 24 hours in advance of the testing.

19.1.6.6.3 The day of the testing, the Contractor shall check with all homes of special concerns to be sure that all persons that may be sensitive to smoke will be out of the home prior to testing.

19.1.6.7 Performance of Smoke Testing:

19.1.6.7.1 Traffic Control: The area of work shall at all times be protected by means of an adequate number of cones, barricades, flags, or whatever means is necessary to properly and safely protect both vehicular and pedestrian traffic. Flag men shall be provided in all streets. Further requirements for traffic control may be imposed by the County.

19.1.6.7.2 No entry into any part of the collection system shall be permitted until the Contractor has demonstrated that on-site personnel have been trained in applicable safety procedures and have the equipment on-site to allow those procedures to be followed.

19.1.6.7.3 Smoke Testing Main Sewers: Restrict ends of sewers adjacent to the test sewer section(s) to inhibit smoke from migrating into non-test sewer sections. The, place a portable air blower over a manhole or cleanout at one end of the test section(s). Liquid smoke is introduced inside at the blower connection. Field personnel shall observe connections or appurtenances in question for visual evidence of smoke. Then take digital photographs of smoke emanating from extraneous flow sources and record the findings onto standard field forms. Unless otherwise approved by the County, the sections of sewer subject to testing shall consist of a central manhole, where the blower will be positioned, and an upstream and downstream manhole and the sewer pipe between them. With three manholes and two pipe sections, lengths shall not exceed 800 feet. Alternate arrangements consist of two manholes and one pipe section. This allows a run of 400 to 800 feet of pipe.

- 19.1.6.7.4 Building Sewer Smoke Testing: Smoke testing will be performed to detect and document extraneous flow sources within the building sewers, when required. A similar procedure is followed for lateral smoke testing except a smaller air blower is used at the existing property line clean out access.

19.1.6.8 Smoke Testing Reports:

- 19.1.6.8.1 For each sewer main tested, the Contractor shall prepare a field log and a report, identifying each point of smoke exfiltration from: a) roof gutters, b) sewer cleanouts, c) leakage in house laterals, d) patio or area drains, e) storm drain cross connections, f) evidence of smoke from roof vents, and g) any other sources.
- 19.1.6.8.2 The points of exfiltration, as identified above, shall be referenced and dimensioned to permanent landmarks or house or lot numbers.
- 19.1.6.8.3 A photograph of all leaks using a digital camera or County approved substitute shall be included in the field log and report.

19.1.7 Flow Isolation/Physical Survey:

- 19.1.7.1 A physical inspection survey will be conducted to identify potential sources of I/I and extraneous flow. The survey will be conducted during optimum groundwater conditions when I/I is suspected of being present. The Contractor shall mobilize within a 48 hour period upon receiving notification from the County that sewer flows have significantly increased and conditions are ideal for investigation.

- 19.1.7.2 Field personnel shall observe the flows in key manholes to identify sewer sections that appear to be conveying excessive flow. When sewer section(s) are identified as having extraneous flows, the upstream manhole shall be plugged, and by means of a volumetric weir placed in the downstream manhole, the flow shall be measured. The findings shall then be recorded onto a standardized field form.

19.1.7.3 Documentation of physical survey results shall be as follows:

- 19.1.7.3.1 Summary Report: Upon completion of a field work event, the Contractor will conduct an in-house Quality Assessment/Quality Control (QA/QC) of all the acquired inspection data prior to preparing a final report, which will summarize the work performed. The report shall be produced in County approved digital spreadsheet format. Included in the report shall be a composite spreadsheet summarizing defects and observations categorized by defect type, priority, and recommendations for repair/rehabilitation or other appropriate follow-up.
- 19.1.7.3.2 Photographs and Field Forms: Noted defects shall be documented on digital photographs and flow isolation field forms. Photographs shall be documented as digital files and hard copy color print-outs. Forms, photographs, and other related documentation will be organized and labeled in an appropriate report format.

- 19.1.8 Summary Report: Upon completion of a field work event, the Contractor will conduct an in-house QA/QC of all the acquired inspection data prior to preparing a final report, which will summarize the work performed. The report shall be produced in County approved digital spreadsheet format. Included in the report shall be a composite

spreadsheet summarizing defects and observations categorized by defect type, priority, and recommendations for repair/ rehabilitation or other appropriate follow-up. Photographs and Field Forms: Noted defects shall be documented on digital photographs and Flow Isolation field forms. Photographs shall be documented as digital files and hard copy color print-outs. Forms, photographs, and other related documentation will be organized and labeled in an appropriate report format. Sewer system investigation reports, which summarize the results of all the investigations undertaken during a monthly period as described in this section, shall be prepared on a monthly basis and provided to the County prior to the end of the following month. This report shall be the basis for reporting sewer system investigative work to the Maryland Department of the Environment.

19.2 Routine Sewer Cleaning:

- 19.2.1 The Contractor shall conduct routine sewer cleaning by use of high pressure sewer jetting equipment (hydro cleaning), supplied by the Contractor as part of this contract, for cleaning of sewer laterals, collectors, and interceptors from 4" through 48". Routine cleaning will be performed by the Contractor, using multiple crews, with sanitary sewer system maps provided by the County, and will be conducted in a logical manner from system extremities towards the major interceptors. Cleaning by the method will be performed on those sections where access is available. It is anticipated that 100 – 200 miles of sewer will be cleaned on an annual basis.
- 19.2.2 The intent of routine sewer line cleaning (main sewers and laterals) is to remove foreign materials, including roots, from the lines and restore the sewer to a minimum of 95% of the original carrying capacity or as required for proper televising, testing, and lining. Routine sanitary sewer cleaning will be conducted on sewer mains (laterals will be excluded from routine cleaning, and only be cleaned under the direction of the County) from the outer reaches of the collector sewers downstream towards the interceptors. The County will provide detailed sewer maps for the Contractor detailing the areas and sections to be cleaned, and it shall be the responsibility of the Contractor to coordinate their work efforts in order to achieve the efficient cleaning of the selected area. The Contractor shall keep detailed log sheets of the sewer segments cleaned, including the County contract number, manhole number, segment length and date of cleaning. It is recognized that there may be some conditions such as broken pipe and major blockages that prevent cleaning from being accomplished or where additional damage would result if cleaning were attempted or continued. Should such conditions be encountered, the Contractor shall notify the County.
- 19.2.3 Designated sewer sections shall be cleaned using hydraulically propelled, high-velocity jet power equipment. Selection of the equipment used shall be based on the conditions of lines at the time the work commences. The equipment and methods selected shall be satisfactory to the County. The equipment shall be capable of removing dirt, grease, rocks, sand, and other materials and obstructions from the sewer lines and manholes.
- 19.2.4 All high-velocity sewer cleaning equipment shall be constructed for ease and safety of operation. The equipment shall have a selection of two or more high-velocity nozzles. Each jetter truck shall carry a minimum of 1,000 feet of high pressure sewer hose. The nozzles shall be capable of producing a scouring action from 15 to 45 degrees, in all size lines designated to be cleaned (4" through 48"). Equipment shall also include a high-velocity gun for washing and scouring manhole walls and floor. The gun shall be capable of producing flows from a fine spray to a solid stream. The equipment shall carry its own water tank, auxiliary engines, pumps, and hydraulically driven hose reel.
- 19.2.5 Debris such as dirt, sand, rocks, grease, and other solid or semisolid material resulting from the cleaning operation shall be removed at the downstream manhole of the section being cleaned. When hydraulic cleaning equipment is used, a suitable dam or weir shall be placed in the downstream manhole to trap all such materials. Passing material from

manhole section to manhole section, which could cause line stoppages, accumulations of sand in wet wells, or damage pumping equipment, shall not be permitted.

- 19.2.6 All materials removed from the sanitary sewer systems shall be transported to an approved disposal site. These materials may be returned to the Bureau of Utilities maintenance yard for disposal. Any hazardous waste material encountered during this project will be considered as a changed condition. Under no circumstance shall sludge or other debris removed during these operations be dumped or spilled into streets, ditches, storm drains, or other sanitary sewers. All solids or semi-solids resulting from the cleaning operations shall be removed from the site.
- 19.2.7 Roots shall be removed by a hydraulic-driven root cutter as they are encountered. Special attention should be used during the cleaning operation to assure almost complete removal of roots. Any roots which could prevent televising, testing, or lining shall be removed.
- 19.2.8 Cleaning Precautions – During sewer cleaning operations, satisfactory precautions shall be taken in the use of cleaning equipment. Care shall be taken by the Contractor to insure that the water head pressure created during cleaning operations does not damage or cause flooding of public or private property being served by the sewer. Additional water for the jetting equipment may be obtained from the County public hydrants, and the Bureau of Utilities will supply the Contractor with fire hydrant meters for use whenever drawing water from a hydrant. There will be no volumetric charge to the Contractor for water used; however, the Contractor is encouraged to conduct water conservation practices. No fire hydrant shall be obstructed in case of a fire in the area served by the hydrant. Gate valves, backflow preventers, or an air gap shall be incorporated in the direct connection to a potable water source, and shall be supplied by the Contractor.
- 19.2.9 Hydraulic Cleaning, including root and grease cutting, and cutting protruding cut-in's prior to televising the sanitary sewers, the sewers will be flushed with water using high pressure flushing equipment, as necessary, to remove materials that could hinder a quality television inspection. Any existing roots will also be removed via specialized cutting equipment. Pre-flushing is considered light cleaning and is defined as requiring up to two passes of cleaning equipment within each sewer section. Light cleaning and/or pre-flushing does not include root cutting, grease cutting or removal of heavy silt. Heavy cleaning shall be considered for more than two passes and will also include root cutting, cutting protruding cut-in connections, grease cutting and/or removal of heavy silt.
- 19.2.10 Reports: A monthly report documenting the various sewer mains cleaned under this section shall be provided to the County, in an electronic format, by the end of the following month. The results of this report shall form the basis of the continuing routine cleaning efforts undertaken in future periods. This report shall be the basis for reporting sewer system routine cleaning to the Maryland Department of the Environment.

19.3 Rehabilitation:

- 19.3.1 The investigation findings will be used to develop long-term strategies for rehabilitation and I/I abatement. The County reserves the right and may elect to withhold any or all of the identified rehabilitation methods provided as part of this contract, and may elect, at its sole discretion, to either perform identified repairs "in-house" or use established sewerline repair contracts. Rehabilitation methods which shall be provided as part of this contract include sewer main and lateral televising, testing, and chemical sealing (grouting) and/or internal pipe sleeving (CIPP point repairs), hydraulic cleaning and root cutting, minor bypass pumping, manhole rehabilitation and repair, manhole frame repairs, sewer lateral cleanout repairs, and other minor specialized sanitary sewer repairs.

19.3.2 Televising, Testing, and Sealing Sewer Mains (Chemical Grouting):

- 19.3.2.1 The intent of pipe joint testing is to identify those sewer pipe joints that are defective (allowing groundwater to enter the sewer system) and that can be

successfully sealed by the internal pipe joint sealing process. Testing will be performed on all joints within a selected manhole run except those joints which are visibly leaking (infiltration). Locations of sewer segments to be tested will be forwarded by the County to the Contractor for scheduling.

- 19.3.2.2 The equipment used shall consist of a television camera, joint testing device (known as a packer), and test monitoring equipment. The equipment shall be constructed in such a way as to provide means for introducing a controlled test medium, under pressure, into the void area created by the expended ends of the joint-testing device. The equipment will also provide a means for continuously measuring the actual static pressure of the test medium within the void area created by the inflation of the packer.
- 19.3.2.3 Void pressure data shall be transmitted electronically from the void to the monitoring equipment.
- 19.3.2.4 All test monitoring shall be above ground and in a location to allow for simultaneous and continuous observation of the television monitor and test monitoring equipment by the County.
- 19.3.2.5 The testing device shall be positioned within the line in such a manner as to straddle the pipe joint to be tested. It should be noted that a specific cable or chain length is designed for each packer size. This specific cable length is what allows each size packer to be positioned with the TV camera in a joint.
- 19.3.2.6 The testing device end elements (sleeves) shall be expanded so as to isolate the joint from the remainder of the line and create a void area between the testing device and the pipe joint. The ends of the testing device shall be expanded against the pipe with sufficient inflation pressure to contain the air within the void without leakage past the expanded ends.
- 19.3.2.7 Air shall then be introduced into the void until a pressure equal to or greater than the required test pressure is observed with the void pressure monitoring equipment. If the required test pressure cannot be developed, due to joint leakage, the joint will have failed the test and shall be sealed.
- 19.3.2.8 After the void pressure is observed to be equal to or greater than the required test pressure, the airflow shall be stopped. If the void pressure begins to decay within 30 seconds, due to joint leakage, the joint will have failed the test and shall be sealed.
- 19.3.2.9 Joint test pressure shall be 3 psi higher than the groundwater pressure, if any, outside the pipe. Groundwater pressure may be determined by positioning the testing device on a visibly infiltrating joint and measuring the resulting void pressure with the void pressure monitoring equipment.
- 19.3.2.10 In the absence of groundwater pressure data, the test pressure shall be equal to 1/2 psi per vertical foot of pipe depth or 3 psi, whichever is greater.
- 19.3.2.11 Upon completing the testing of each individual joint, the packer shall be deflated with the void pressure meter maintaining the established air test pressure. Should the void pressure meter fail to drop to zero, the Contractor shall be instructed to clean their equipment of residual grout material or make the necessary equipment repairs to provide for an accurate void pressure reading. Joints that fail to meet the specified test criteria shall be re-tested and/or sealed until the test criteria can be met.
- 19.3.2.12 During the joint testing work, records shall be kept which include: identification of the manhole section tested; the test pressure used and duration

of the test; location (footage) of each joint tested and location of any joints not tested and reason for not testing; statement indicating the results of each joint tested; test pressure achieved and maintained for each joint passing the air test.

19.3.3 Television, Testing, Repairing, and Sealing Laterals (Chemical Grouting):

19.3.3.1 This section deals with the inspection, testing, sealing, and repairing of cleanouts for lateral sewer (house) connections

19.3.3.2 Cleaning of the main sewers shall be performed by the Contractor prior to sealing operations. If the main sewer is not cleaned adequately for seating a lateral packer and/or accessing lateral connections, the Contractor shall repeat the cleaning process and re-inspect until the laterals are accessible.

19.3.3.3 Television inspection shall be done within the main sewers and shall note the location of lateral connections and the general condition of each lateral. Also during this inspection, the Contractor along with the County, shall determine which laterals can be accessed, and if there is enough clearance for the lateral sealing packer. The Contractor shall identify the service connections which cannot be grouted from the main or require any correction before grouting.

19.3.3.4 Protruding services or taps shall be cut back to the main sewer inside wall or otherwise removed so testing and sealing equipment will pass. As a general rule, service connections protruding more than 5/8" into an 8" diameter sewer shall be cut back.

19.3.3.5 Air testing of laterals:

19.3.3.5.1 Air testing of laterals shall be accomplished by isolating the area to be tested with the packer and inversion sleeve and applying positive pressure into the isolated void area up the lateral for a distance of at least six feet.

19.3.3.5.2 A sensing unit shall be used for continuous monitoring of the void pressure. This sensing unit is located within the void area and accurately transmits pressure readout to the control panel inside the TV/Seal unit.

19.3.3.5.3 The test procedure shall consist of applying air pressure into each isolated void area. To isolate a void, the lateral sealing packer is positioned straddling the lateral. The operator inflates the inversion tube up the lateral and then inflates the packer ends to isolate the lateral. A pressure of 5 psi air pressure shall be applied into the isolated void area.

19.3.3.5.4 The test is considered positive if the time for a drop of pressure from 5 psi to 3 psi exceeds 15 seconds. Otherwise, the lateral is considered to have failed the air test and shall be grouted.

19.3.3.5.5 After completing the air test for each individual lateral, the lateral packer shall be deflated, with the void pressure meter continuing to display void pressure. If the void pressure does not drop to approximately zero, the equipment shall be adjusted to provide a zero void pressure reading at the monitor.

19.3.3.5.6 All specified laterals shall be tested regardless of whether they are leaking or not.

19.3.3.6 Sealing laterals:

- 19.3.3.6.1 Laterals shall be sealed if the lateral does not pass the air test as described above.
- 19.3.3.6.2 The lateral packer remains in position, maintaining the isolated void. A two component chemical grout sealant is pressure injected through the lateral packer into the isolated void. Under pressure, the grout material is then forced out into the soil through leaking joint and pipe defects. The pumping and reaction or gel time must be chosen to ensure that enough grout will be placed outside the pipe to provide an effective seal. Typically, the minimum gel time allowed is 20 to 30 seconds. This will vary depending on the exact equipment used and the pumping rate at which the Contractor's equipment can place the grout.
- 19.3.3.6.3 The pump capacity must be sufficient to initially fill up the isolated void before the two component chemical grout sealant gels. After filling up the isolated void, the pumping rate should be adjusted to bring up and maintain a backpressure of 10 psi into the isolated void. The backpressure is measured at the void area and is not pressure as measured back at the pump. Typically, gel times for lateral sealing fall between 20 to 30 seconds.
- 19.3.3.6.4 The amount of chemical grout pumped is based on the number of pump strokes delivered to each lateral. The volume of grout used is recorded on the sealing log along with the gel time used as well as the outside temperature. Note that it is important to get as much chemical outside the lateral into the surrounding soil. The internal void area created by the packer should be known to determine how much chemical was actually placed outside the lateral.
- 19.3.3.6.5 Upon completion of the lateral sealing procedure, the lateral shall be air-tested a second time to verify the sealing of the connection, the air test is the same as outlined above.
- 19.3.3.6.6 If the lateral fails the air test a second time, the grouting procedure is repeated. This sequence of air testing, grouting, and subsequent air testing is repeated until either the lateral is sealed or it is determined that the grout consumption is too high and may result in the blockage of the lateral pipe.
- 19.3.3.6.7 The final determination to stop subsequent attempts to seal a lateral will be made jointly between the County and the Contractor.
- 19.3.3.7 Lateral flow is verified after the successful sealing of each lateral:
 - 19.3.3.7.1 Once the inflation tube is retracted and the connection is viewed with a television camera, an attempt is made to obtain a water flush by the occupant. If no water is viewed during this procedure, it is assumed the building sewer is clogged with grout and responsibility to clear the lateral will be with the Contractor.
 - 19.3.3.7.2 The Contractor shall attach to the door of each home or building for which laterals have been grouted, a notification to the occupant stating that the lateral servicing this listed address was grouted on this particular date and if any blockage of sanitary flow occurs, the occupant should call the Contractor. The Contractor shall supply these notification forms. The Contractor shall be prepared to take

prompt action to restore service by cleaning blockages, 24/7, after being notified by the occupant.

- 19.3.3.7.3 The complete procedure shall be videotaped during the air testing and sealing operation. The videotapes are to be submitted to the County for review and permanent record. The videotape displays the date, manhole numbers, footage to the lateral, and VOID pressure readout. In addition, the data obtained during this operation is recorded on a lateral testing and sealing log provided by the Contractor.

19.3.3.8 Repairing of Sewer Lateral Cleanouts:

- 19.3.3.8.1 Sewer cleanouts shall be repaired in accordance with Howard County Volume IV Design Standards at the direction of the County.
- 19.3.3.8.2 Repairs shall include standpipe repair (hand tool excavations only), and cleanout cap repairs.
- 19.3.3.8.3 Sewer lateral cleanout repairs shall be on a time and material basis only, under the direction of the County.

19.3.4 Chemical Sealing Materials – The following is a listing of acceptable chemical sealing materials and the basic requirements, properties, and characteristics of each.

19.3.4.1 Acrylamide base gel sealing material:

- 19.3.4.1.1 A minimum of 10% acrylamide base material by weight in the total sealant mix. A higher concentration of acrylamide base material may be used to increase strength or offset dilution during injection.
- 19.3.4.1.2 The ability to tolerate some dilution and react in moving water during injection.
- 19.3.4.1.3 A viscosity of approximately two centipoises which can be increased with additives.
- 19.3.4.1.4 A constant viscosity during the reaction period.
- 19.3.4.1.5 A controllable reaction time from 10 seconds to 1 hour.
- 19.3.4.1.6 A reaction (curing) which produces a homogeneous, chemically stable, non-biodegradable, firm, flexible gel.
- 19.3.4.1.7 The ability to increase mix viscosity, density, and gel strength by the use of additives.

19.3.4.2 Acrylic base gel chemical sealing material:

- 19.3.4.2.1 A minimum of 10% acrylic base material by weight in the total sealant mix. A higher concentration (%) of acrylic base material may be used to increase strength of set dilution during injection.
- 19.3.4.2.2 The ability to tolerate some dilution and react in moving water during injection.

- 19.3.4.2.3 A viscosity of approximately two centipoises which can be increased with additives.
- 19.3.4.2.4 A constant viscosity during the reaction period.
- 19.3.4.2.5 A controllable reaction time from five seconds to six seconds.
- 19.3.4.2.6 A reaction (curing) which produces a homogeneous, chemically stable, non-biodegradable, flexible gel.
- 19.3.4.2.7 The ability to increase mix viscosity, density, and gel strength by the use of additives.

19.3.4.3 Urethane base gel chemical sealing material:

- 19.3.4.3.1 One part urethane prepolymer thoroughly mixed with between five and ten parts of water weight. The recommended mix ration is one part urethane prepolymer to eight parts of water (11% prepolymer).
- 19.3.4.3.2 A liquid prepolymer having a solids content of 77% to 83%, specific gravity of 1.04 (8.65 pounds per gallon), and a flash point of 20° F.
- 19.3.4.3.3 A liquid prepolymer having a viscosity of 6,000 to 1,200 centipoises at 70° F than can be pumped through 500 feet of 1/2" hose with a 1,000 psi head at a flow rate of one ounce per second.
- 19.3.4.3.3 The water used to react the prepolymer should have a pH of five to nine.
- 19.3.4.3.4 A cure time of 80 seconds at 40° F, 55 seconds at 60° F, and 30 seconds at 80° F when one part prepolymer is reacted with 8 parts of water only.
- 19.3.4.3.5 A cure time that can be reduced to 10 seconds for water temperatures of 40° F to 80° F when 1 part prepolymer is reacted with 8 parts of water containing a sufficient amount of gel control agent additive.
- 19.3.4.3.6 A relatively rapid viscosity increase of the prepolymer/water mix. Viscosity increases from about 10 to 60 centipoises in the first minute for one to eight prepolymer/water ration at 50° F.
- 19.3.4.3.7 A reaction (curing) which produces a chemically stable and non-biodegradable, tough, flexible gel.
- 19.3.4.3.8 The ability to increase mix viscosity, density, gel strength, and resistance to shrinkage by the use of additives to the water.

19.3.5 Manhole Rehabilitation:

- 19.3.5.1 The intent is to provide a system for manhole rehabilitation that stops infiltration, restores structural integrity, and provides protection against corrosion.
- 19.3.5.2 The applicator, approved and trained by the manufacturer, shall furnish all labor, equipment, and materials for applying a cementitious mix with machinery specially designed for the application. All aspects of the installation shall be in accordance with the manufacturer's recommendation and with the following specifications which include:

- 19.3.5.2.1 Elimination of active infiltration prior to the application.
- 19.3.5.2.2 Removal of loose and unsound material and cleaning surfaces.
- 19.3.5.2.3 Repair and sealing of the invert and benches.
- 19.3.5.2.4 Spray application of a cementitious mix to form a liner.

19.3.5.3 Materials:

- 19.3.5.3.1 Patching Mix: A quick-setting cementitious material shall be used as a patching mix and is to be mixed and applied according to manufacturer's recommendations and shall have the following minimum requirements:
 - Compressive Strength: ASTM C-579 B, 6hr, 1400 psi
 - Shrinkage: ASTM C596, 0% at 90% R.H.
 - Bond: ASTM C-321, 28 day, 150 psi Cement Sulfate Resistant Density, when applied, 105 +5 pcf.
- 19.3.5.3.2 Infiltration Control Mix: A rapid-setting cementitious product specifically formulated for leak control shall be used to stop minor water infiltration and shall be mixed and applied according to manufacturer's recommendations and shall have the following minimum requirements: Compressive Strength: ASTM C-579 B, 1hr, 600 psi Compressive Strength: ASTM C-579, 24 hr, 1000 psi Bond: ASTM C-321, 1 hr, 30 psi Bond: ASTM C-321, 24 hr, 80 psi
- 19.3.5.3.3 Liner Mix: The cementitious liner shall be used to form the structural/structurally enhanced monolithic liner covering all interior manhole surfaces and shall have the following minimum requirements at 28 days:
 - Compressive Strength: ASTM C-109, 9000 psi
 - Tensile Strength; ASTM C-190, 600 psi
 - Flexural Strength; ASTM C-293, 600 psi
 - Shrinkage; ASTM C-157, 0%
 - Shear Bond; ASTM C-157, 1900 psi
 - Density, when applied: 105 pcf.
- 19.3.5.3.4 Grouting Mix: A cementitious grout shall be used for stopping very active infiltration and filling voids and shall be mixed and applied according to manufacturer's recommendations. The cementitious grout shall be volume stable and have a minimum 28 day compressive strength of 250 psi and a one day strength of 50 psi. Chemical grouts may be used for stopping very active infiltration and shall be mixed and applied per manufacturer's recommendations.
- 19.3.5.3.5 Water: Water shall be clean and potable. Questionable water shall be tested by a testing laboratory in accordance with ASTM C-94. Potable water need not be tested.
- 19.3.5.3.6 Other Materials: No other material shall be used with the above mixes without prior approval or recommendation from the manufacturer.

19.3.5.4 Preparation:

- 19.3.5.4.1 Place covers over invert to prevent extraneous material from entering the sewer lines.
- 19.3.5.4.2 All foreign material shall be removed from the manhole wall and bench using a high-pressure water spray (minimum 3,500 psi). Loose and protruding brick, mortar, and concrete shall be removed using a mason's hammer and chisel and/or scraper. Fill any large voids with quick-setting patching mix. The surface to be repaired must be clean and free of any loose materials with walls totally saturated with water. Any standing water must be removed.
- 19.3.5.4.3 Minor leaks shall be stopped using the quick-setting specially formulated infiltration control mix and shall be mixed and applied per manufacturer's recommendations. Some leaks may require weep holes to localize the infiltration during the application, after which the weep holes shall be plugged with the quick-setting infiltration control mix prior to the final liner application. When severe infiltration is present, drilling may be required in order to pressure grout using a cementitious or chemical grout. Manufacturer's recommendations shall be followed when pressure grouting is required.

19.3.5.5 Invert Repair:

- 19.3.5.5.1 After all preparation has been completed, remove all loose material and wash wall again.
- 19.3.5.5.2 Any bench, invert, or service line repairs shall be made at this time using the quick-setting patching mix and shall be used per manufacturer's recommendations.
- 19.3.5.5.3 Invert repair shall be performed on all inverts with visible damage or infiltration. After blocking flow thru the manhole and thoroughly cleaning invert, the quick-setting patch mix shall be applied to the invert in an expeditious manner. The mix shall be troweled uniformly onto the damaged invert extending out onto the base of the manhole sufficiently to tie into the structural/structurally enhanced monolithic liner to be applied. The finished invert surfaces shall be smooth and free of ridges. The flow may be re-established in the manhole within 30 minutes after placement of mix.

19.3.5.6 Liner Application:

- 19.3.5.6.1 No application shall be made to frozen surfaces or if freezing is expected to occur inside the manhole within 24 hours after application. If ambient temperatures are in excess of 95° F, precautions shall be taken to keep the mix temperature at time of application below 90° F. Mix water temperature shall not exceed 85° F. Chill with ice if necessary.
- 19.3.5.6.2 On new, poured-in-place, or precast concrete manholes, a single application of the liner mix shall be spray applied to a total thickness of 1/2 inch in one application. This requires the manufacturer's consultation and approval.
- 19.3.5.6.3 Mixing: For each bag of product, use the amount of water specified by the manufacturer and mix for approximately five minutes after

all materials have been placed in the mixer, using equipment per manufacturer's recommendations.

- 19.3.5.6.4 Empty the mixed material into the holding hopper and prepare another batch with timing such that the nozzle man can spray in a continuous manner without interruption until each application is complete.

19.3.5.6.5 Spraying:

19.3.5.6.5.1 First Application: The surface prior to spraying shall be damp without noticeable free water droplets or running water, but totally saturated. Materials shall be spray applied from the bottom of the wall to the top, to a minimum uniform thickness to insure that all cracks, crevices, and voids are filled and a relatively smooth surface remains after light troweling. The light troweling is performed to compact the material into voids and to set the bond.

19.3.5.6.5.2 Second Application: A second application is applied after the first application has begun to take an initial set (disappearance of surface sheen which could be 15 minutes to one hour depending on ambient conditions) to assure a minimum total finished thickness of 1/2 inch. Again, application shall be from the bottom up. The surface is then troweled to a smooth finish being careful not to over trowel so as to bring additional water to the surface and weaken it. Manufacturer's recommendations shall be followed when more than 24 hours have elapsed between applications.

- 19.3.5.6.6 Bench Application: The wooden covers shall be removed at this time and the bench sprayed such that a gradual slope is produced from the walls to the invert with the thickness at the edge of the invert being no less than 1/2 inch. The wall bench intersection shall be rounded to a uniform radius that full circumference of the intersection.

19.3.5.7 Curing:

- 19.3.5.7.1 Caution should be taken to minimize exposure of applied product to sunlight and air movement. If application of second coat is to be longer than 15 minutes after completion of application of first coat, the manhole cover shall be set back in place. At no time should the finished product be exposed to sunlight or air movements for longer than 15 minutes before replacing the manhole cover. In extremely hot and arid climates manhole should be shaded while application is in process. The final application shall have a minimum of four hours cure time before being subjected to active flow.

- 19.3.5.7.2 Traffic shall not be allowed over manholes for 12 hours after reconstruction is complete.

- 19.3.5.8 Acceptance: At the direction of the County, rehabilitated manholes shall be tested as follows:

19.3.5.8.1 Visually verify the absence of leaks.

19.3.5.8.2 Perform an exfiltration test. Manholes up to six feet deep – a water loss of one inch or less in five minutes is acceptable.

19.3.5.8.3 Manholes over six feet deep – a water loss of one inch or less plus 1/8 inch per additional foot of depth in five minutes is acceptable.

19.3.5.9 Manhole Frame and Cover Repairs:

19.3.5.9.1 Repairs to and/or replacement of manhole frames and covers shall be done in accordance with the Howard County Volume IV Design Manual details.

19.3.5.9.2 Repairs shall include frame and cover replacement for both standard and watertight frames and covers. Approved watertight inserts may be used at the discretion of the County in lieu of watertight frame and cover replacement.

19.3.5.9.3 Precast grade rings with approved mastic shall be used to adjust frame heights. Sewer brick may be used in lieu of grade rings if approved by the County.

19.3.5.9.4 Manhole frame and cover repairs shall be on a time and material basis only and under the direction of the County.

19.3.6 Cured-In-Place Point (CIPP) Repairs:

19.3.6.1 This method of repair is to provide for the rehabilitation of gravity sanitary sewers by installation of a resin impregnated fiberglass patch into the existing pipe using an inflatable element and air pressure. Curing of the resin impregnated fiberglass patch shall be accomplished at ambient temperature and shall result in a hard, impermeable, corrosion resistant pipe within a pipe.

19.3.6.2 Design wall thickness calculations for the point repair shall be made in accordance with ASTM 1216, Appendix XI. The design of the point repair shall take into consideration the type of deterioration or damage to the existing host pipe, as well as hydraulic, soil, and live loads.

19.3.6.3 The installation of the point repair shall be defined as the rehabilitation of an existing conduit by the installation of a composite material tube (silicate resin-impregnated fiberglass), which is first formed into an overlapping tube from a sheet and then pulled, pushed, or both, into the sewer host pipe. After insertion, the tube shall be inflated using air pressure and then cured at ambient temperature until the composite material tube is a hard, impermeable pipe. The repair shall extend a minimum of one foot past either end of the defect.

19.3.6.4 The point repair shall be fabricated from materials which, when cured, will be able to withstand internal exposure to sewer gases and effluent containing hydrogen sulfide, carbon monoxide, carbon dioxide, methane, dilute sulfuric acid, and external exposure to soil bacterial and chemical attack which may be due to materials in the surrounding ground.

19.3.6.5 This process is applicable for short repairs up to five feet (1.5 meters) in length and in diameters from 3" to 27" (80 to 700 mm), and longer lengths up to 16 feet (5 meters) in length and in diameters from 3" to 32" (80 to 800 mm). Longer repairs may be accomplished by installing multiple patches end to end with a 1" to 2" overlap of material where the patches are joined.

19.3.6.6 Materials:

- 19.3.6.6.1 Fiberglass Mat – The tube shall be fabricated from a two-sided fiberglass mat, comprised of a chopped fiber mat on one side bonded to a woven fiberglass mat on the other.
- 19.3.6.6.2 Silicate Resin – The resin shall be an ambient curing, two-part silicate based resin with a “Waterglass” hardener.
- 19.3.6.6.3 Physical Properties – When cured, the minimum physical properties of the patch shall be equal to or greater than those listed in the table below:

Physical Property	Value
Flexural Strength	27,000 psi
Flexural Modulus	800,000 psi

19.3.7 Preparatory Procedures:

- 19.3.7.1 Safety precautions shall be in strict accordance with all applicable OSHA standards. All requirements for traffic control and confined space entry will be observed.
- 19.3.7.2 The flow of sewage around the section of sewer pipe under repair shall be maintained. A suitable bypass shall be constructed by installing a plug in the sewer line to a point upstream of the pipe under repair and pumping the sewage to a point in the same sewer line downstream of that section. The pump and bypass lines shall be of adequate capacity and size to handle the flow of sewage and prevent any backflow of sewage into homes connected to the sewer line.
- 19.3.7.3 Cleaning of the sewer pipe shall be carried out immediately before TV inspection.
 - 19.3.7.3.1 Clean out the pipe using a high pressure water jet.
 - 19.3.7.3.2 Remove any roots, dirt, or debris that might affect the installation.
- 19.3.7.4 TV inspection of the sewer pipe shall be carried out immediately before insertion of the tube, to ensure that the sewer is clean and that the pipe conditions have not changed.
 - 19.3.7.4.1 Measure pipe diameter.
 - 19.3.7.4.2 Determine position and size of the defect.
 - 19.3.7.4.3 Mark the TV cable with a piece of tape to indicate the distance from the entrance of the host pipe to the defect.
- 19.3.7.5 Insert Pull Rope: Insert a pull rope from the upstream to downstream manhole.
- 19.3.7.6 Calculate length of patch, adding sufficient length to allow for the patch to extend one foot into the undamaged host pipe at each end of the repair.
- 19.3.7.7 Calculate the amount of material required to make the patch.
 - 19.3.7.7.1 Calculate the amount of fiberglass material required for the patch, allowing enough material for the three-layer thickness recommended by the manufacturer.

- 19.3.7.7.2 Calculate the amount of resin required to wet out the patch according to tables provided by the manufacturer.
- 19.3.7.8 Wet out the patch.
 - 19.3.7.8.1 Lay out the fiberglass material, woven side down on a clean sheet of plastic.
 - 19.3.7.8.2 Mix the two-part silicate resin in accordance with manufacturer's instructions.
 - 19.3.7.8.3 Apply the resin to the fiberglass material and fold the patch in accordance with manufacturer's instructions.
- 19.3.7.9 Roll wet out patch onto the fixed diameter packer.
 - 19.3.7.9.1 Install protective sleeve around fixed diameter packer.
 - 19.3.7.9.2 Roll the patch around the packer.
 - 19.3.7.9.3 Secure the patch to the packer with the binding wire.
- 19.3.7.10 Insert packer and patch into the sewer line.
 - 19.3.7.10.1 Mark the push rods and positioning rope with the measurement for the position of the defect.
 - 19.3.7.10.2 Insert the packer into the host pipe and center the area of the defect on the patch.
- 19.3.7.11 Inflate the packer.
 - 19.3.7.11.1 Slowly inflate the packer to a safe working pressure.
 - 19.3.7.11.2 Listen for the binding wire to pop.
 - 19.3.7.11.3 Tie off positioning rope.
- 19.3.7.12 Cure the Patch: Allow the patch to cure the prescribed amount of time.
- 19.3.7.13 Deflate and remove packer.
- 19.3.7.14 Post TV.
 - 19.3.7.14.1 Using CCTV, examine the patch and determine that it is properly installed.
 - 19.3.7.14.2 Make a video tape for the County.
- 19.3.8 Summary Report: A Sewer System Rehabilitation Report, which summarizes the results of all the rehabilitation activities undertaken during a monthly period as described in this section, shall be prepared on a monthly basis and provided to the County prior to the end of the following month. This report shall be the basis for reporting sewer system rehabilitative work to the Maryland Department of the Environment.

SECTION E

SUBMISSION REQUIREMENTS

1 INSTRUCTIONS:

- 1.1 All bids must be clearly identified on the front of the envelope or top of the carton with the solicitation number, title of the solicitation and the due date and time. Faxed or emailed bids in response to this formal Invitation for Bid are not acceptable.
- 1.2 All bids must be signed by an authorized officer or agent of the Contractor submitting the bid and delivered in sealed envelopes or cartons to the Issuing Office no later than the time and date indicated. Bids received after the time and date indicated will not be accepted or considered.
- 1.3 The submission of a bid shall be considered an agreement to all the terms, conditions, and specifications provided herein and in the various bid documents, unless specifically noted otherwise in the bid.
- 1.4 Each bid shall be accompanied by the Affidavit regarding price fixing, gratuities, bribery, and discriminatory employment practices in accordance with Section E.1.c. (3)(b) of the Howard County Purchasing Manual. When the Contractor is a corporation, a duly authorized representative of said corporation shall execute the Affidavit. The Affidavit is provided in the solicitation package.
- 1.5 The Foreign Services Disclosure Form must accompany bids for construction-related services, architectural services, engineering services and energy performance contract services of \$2 million or more. Section 12-111 of the Maryland State Finance and Procurement Article requires bidders to local governments to make certain disclosures regarding plans, at the time the bid is submitted, to perform any services under the contract outside the United States. When applicable, the Foreign Services Disclosure form is provided in the solicitation package.
- 1.6 If a discrepancy in or omission from the specifications is found, or if a Contractor is in doubt as to their meaning, or feels that the specifications are discriminatory, the Contractor shall notify the Buyer in writing not later than ten days prior to the scheduled opening of bids. Exceptions taken do not obligate the County to change the specifications. The Issuing Office will notify all Contractors of any changes, additions or deletions to the specifications by addenda posted on the Office of Purchasing web site (www.howardcountymd.gov/purchasing).
- 1.7 The County will assume no responsibility for oral instructions or suggestions. All official correspondence in regard to the specifications shall be directed to and will be issued by the Issuing Office.

2 BID DOCUMENTS: The required documents shall be submitted, in duplicate (original and one copy), to the Issuing Office no later than the opening date and time specified in Section A. Failure to return required documents may be cause for rejection of the bid. This solicitation requires the return of the following documents:

- 2.1 Section "F", (Price Pages, Contractor's Qualification Information)
- 2.2 Section "G" (Affidavit)
- 2.3 Section "H" (Equal Business Opportunity Participation)
- 2.4 Section "I" (Wage Requirement)

3 ELECTRONIC AND HARD COPIES: Contractors should submit a CD or Flash Drive containing the entire, identical hard copy of the proposal along with the hard copies required above.

- 4 **SAMPLE INVOICE:** Contractors are required to provide a sample invoice with the bid response. The sample invoice shall contain the details enumerated in Section D, Paragraph 13.2.
- 5 **LITERATURE:** Two sets of complete descriptive literature must be furnished with bid. Failure to do so shall be sufficient cause for rejection of the bid. Use of recycled paper is encouraged.
- 6 **EXCEPTIONS:** If the Contractor cannot meet the terms, conditions and/or specifications of the solicitation, the Contractor must furnish a statement on company letterhead giving a complete description of any exceptions to the terms, conditions, and specifications. Failure to furnish the statement means that the Contractor agrees to all terms, conditions and specifications. Exceptions taken do not obligate the County to change the terms, conditions and/or specifications. Exceptions to the terms and/or conditions and/or to the County's standard Agreement may be sufficient cause for rejection of the bid.
- 7 **SITE CONDITIONS:** The submission of a bid shall be considered representation that the Contractor has carefully investigated all conditions which affect or may, at some future date, affect the performance of the work or services covered by the solicitation, the entire area to be serviced as described in the solicitation and that the Contractor is fully informed concerning the conditions to be encountered, character, quality and quantity of work to be performed, and equipment and materials to be furnished. The Contractor shall also be familiar with all Federal, State, and County laws, all codes and ordinances of the County which in any way affect the performance of the work, or persons engaged or employed in the work, or the materials and equipment used in the work. Failure to submit a bid deposit shall be cause for rejection of the bid.

SECTION F
PRICE PAGE NO. 1

SEWER SYSTEM INSPECTION, CLEANING, AND REHABILITATION SERVICES

The undersigned agrees to furnish and deliver the above goods and/or services in accordance with the specifications issued for same, and subject to all terms, conditions, and requirements in the solicitation, and in the various bid documents:

COMPANY NAME: _____

FEDERAL TAX IDENTIFICATION NO./SOCIAL SECURITY NO.: _____

ADDRESS: _____
(Street) (City) (State) (Zip)

TELEPHONE: _____ FAX: _____

EMAIL ADDRESS: _____

REPRESENTATIVE'S NAME: _____

TITLE: _____

Provide the name and title of the person with legal authority to sign on behalf of the Contractor. If the title of the individual is not "President" or "Vice President", provide verification of the signatory authority with your submittal.

NAME OF COMPANY SIGNATORY (Printed): _____

TITLE OF COMPANY SIGNATORY (Printed): _____

Howard County prefers to email Purchase Orders when possible, please provide an **EMAIL ADDRESS FOR RECEIPT OF PURCHASE ORDERS**: _____

Is the company a Minority-, Women-, or Disabled-Owned Business Enterprise? ☐ YES ☐ NO

If yes, indicate the type of minority ownership:

☐ African American ☐ Asian American ☐ Disabled ☐ Eskimo
☐ Female ☐ Hispanic ☐ Native American

Is the company certified? If yes, indicate the certification(s) held:

☐ Howard County Government ☐ MD Dept. of Transportation
☐ City of Baltimore ☐ Other

Certification Number(s) and Expiration Date(s): _____

Does the company have a written non-discrimination policy (i.e.: race, creed, religion, handicap, color, sex, national origin, age, occupation, marital status, political opinion, sexual orientation, gender identity/expression, personal appearance, familial status, source of income)? ☐ YES ☐ NO

The County reserves the right to request such documentation, if desired, at a later date.

The company accepts Visa cards: ☐ Yes ☐ No

Contractors are not permitted to charge the County any additional fees over and above their bid prices to process payments on procurements cards.

SECTION F
PRICE PAGE NO. 2

COMPANY NAME: _____

Payment Terms: (The payment terms shall be considered net 30 days unless otherwise indicated.) _____

Howard County is exempt from all local, state, and federal taxes, and prices stipulated by the Contractor are considered maximum and are not subject to any increase due to any taxes, or any other reason. The County's Tax Exemption Number is 30001219.

☐ We wish to submit a "NO BID" at this time, but request that our company remain on the Contractors list for future solicitations.

TOTAL BID PRICE \$ _____

ACKNOWLEDGEMENT OF ADDENDA: The company shall identify by number and date the following addenda and agree that the prices shown in the bid reflect all changes made by addenda. To check for addenda go to: www.howardcountymd.gov/purchasing

Number: _____	Date: _____	Number: _____	Date: _____
Number: _____	Date: _____	Number: _____	Date: _____

**THE PERSON SIGNING THE PRICE PAGE MUST INITIAL ANY
ALTERATIONS IN FIGURES IN INK.**

SIGNATURE: _____ DATE: _____

PRINTED NAME: _____ TITLE: _____

SECTION F
PRICE PAGE NO. 3

COMPANY NAME: _____

TITLE: Services Contract for Sewer System Investigation, Cleaning, and Rehabilitation

NIGP CODE/PRODUCT CODE: 96892 Water Supply Plant Operating/Monitoring System Services

ITEM NO.	COMMODITY/SERVICE DESCRIPTION	ESTIMATED QUANTITY	UOM	UNIT PRICE (2 Decimal Places Only**)	EXTENDED PRICE
1	Flow Isolation/Physical Survey (Field Crew)	300	Hours	\$ _____	\$ _____
2	Light Cleaning/Pre-Flushing, 6" Sewer	100,000	Feet	\$ _____	\$ _____
3	Light Cleaning/Pre-Flushing, 8" Sewer	300,000	Feet	\$ _____	\$ _____
4	Light Cleaning/Pre-Flushing, 10" Sewer	50,000	Feet	\$ _____	\$ _____
5	Light Cleaning/Pre-Flushing, 12" Sewer	50,000	Feet	\$ _____	\$ _____
6	Light Cleaning/Pre-Flushing, Over 12" Sewer	50,000	Feet	\$ _____	\$ _____
7	Heavy Cleaning (Includes Root & Grease Cutting, and Protruding Tap Cutting), 6" Sewer	50	Hours	\$ _____	\$ _____
8	Heavy Cleaning (Includes Root & Grease Cutting, and Protruding Tap Cutting), 8" Sewer	100	Hours	\$ _____	\$ _____
9	Heavy Cleaning (Includes Root & Grease Cutting, and Protruding Tap Cutting), 10" Sewer	50	Hours	\$ _____	\$ _____
10	Heavy Cleaning (Includes Root & Grease Cutting, and Protruding Tap Cutting), 12" Sewer	100	Hours	\$ _____	\$ _____
11	Heavy Cleaning (Includes Root & Grease Cutting, and Protruding Tap Cutting), Over 12" Sewer	10	Hours	\$ _____	\$ _____
12	CCTV Inspection, 6" Sewer	5,000	Feet	\$ _____	\$ _____
13	CCTV Inspection, 8" Sewer	125,000	Feet	\$ _____	\$ _____
14	CCTV Inspection, 10" Sewer	10,000	Feet	\$ _____	\$ _____
15	CCTV Inspection, 12" Sewer	10,000	Feet	\$ _____	\$ _____
16	CCTV Inspection, Over 12" Sewer	50,000	Feet	\$ _____	\$ _____

SECTION F

PRICE PAGE NO. 4

ITEM NO.	COMMODITY/SERVICE DESCRIPTION	ESTIMATED QUANTITY	UOM	UNIT PRICE (2 Decimal Places Only**)	EXTENDED PRICE
17	Smoke Testing, Mainline	2,500	Feet	\$ _____	\$ _____
18	Smoke Testing, Laterals	50	Each	\$ _____	\$ _____
19	Sewer Joint Air Testing and Sealing, 6" Mainline (Includes Pre-Clean, CCTV Inspection, Air-Test, Seal [Including Grout], And Re-Test)	1,000	Feet	\$ _____	\$ _____
20	Sewer Joint Air Testing and Sealing, 8" Mainline (Includes Pre-Clean, CCTV Inspection, Air-Test, Seal [Including Grout], And Re-Test)	5,000	Feet	\$ _____	\$ _____
21	Sewer Joint Air Testing and Sealing, 10" Mainline (Includes Pre-Clean, CCTV Inspection, Air-Test, Seal [Including Grout], And Re-Test)	1,000	Feet	\$ _____	\$ _____
22	Sewer Joint Air Testing and Sealing, 12" Mainline (Includes Pre-Clean, CCTV Inspection, Air-Test, Seal [Including Grout], And Re-Test)	1,000	Feet	\$ _____	\$ _____
23	Sewer Joint Air Testing and Sealing, Over 12" Mainline (Includes Pre-Clean, CCTV Inspection, Air-Test, Seal [Including Grout], And Re-Test)	500	Feet	\$ _____	\$ _____
24	Manhole Rehabilitation, Channel & Bench Rehab	10	Each	\$ _____	\$ _____
25	Manhole Rehabilitation, Frame Seal	10	Each	\$ _____	\$ _____
26	Manhole Rehabilitation, Manhole and Riser Cementitious Lining (Non-Epoxy)	100	Vertical Feet	\$ _____	\$ _____
27	Manhole Rehabilitation, Manhole Frame and Cover Repair/Replacement (Time and Materials Cost)	100	Hours	\$ _____	\$ _____

SECTION F

PRICE PAGE NO. 5

ITEM NO.	COMMODITY/SERVICE DESCRIPTION	ESTIMATED QUANTITY	UOM	UNIT PRICE (2 Decimal Places <u>Only**</u>)	EXTENDED PRICE
28	Manhole Grout Sealing, Seal Manhole Leaks With Grout (Including Grout)	10	Each	\$ _____	\$ _____
29	Sewer Lateral (House) Connection Grout Sealing (Including Grout), And Cleanout Repairs, SHC Grouting	10	Each	\$ _____	\$ _____
30	Sewer Lateral (House) Connection Grout Sealing (Including Grout), And Cleanout Repairs, Cleanout Repairs	20	Hours	\$ _____	\$ _____
31	Reports, Data Compilation, Summary Spreadsheets, and Required Deliverables, Monthly Reports for Investigations, Cleaning, and Rehabilitation	12	Each	\$ _____	\$ _____
TOTAL BID PRICE *					\$ _____

* This figure should appear as Total Bid Price, Price Page No. 1

** Please note that prices shall only have **TWO DECIMAL PLACES**. The County's financial system will not allow more than two decimal places, adjust responses accordingly.

Additional Pricing Required: The County requires pricing for the following item. This line will not be considered in the total bid price.

Materials Cost (For Those Materials Not Included In Other Unit Price Bid Items)	Discount percentage off list price	_____ % off list price
---	------------------------------------	------------------------

INVOICE PROCEDURE FOR SUCCESSFUL CONTRACTORS:

In order to facilitate prompt payment, invoices must contain the above commodity and/or service descriptions and pricing. Invoices failing to contain the required line item detail, including contract line number and unit pricing, may be returned for correction. Please submit a sample invoice with the response.

SECTION F

CONTRACTOR'S QUALIFICATION INFORMATION

COMPANY NAME: _____

1. References: Give name, address, and telephone number of owner or manager of three accounts for which Contractor has provided sewer system inspection, cleaning, and rehabilitation services during the past three years.

1.1.	Account Name	Contract Completion Date
	_____	_____
	Owner/Manager	Telephone
	_____	_____
	Address	Email
	_____	_____
	_____	_____
	_____	_____
1.2.	Account Name	Contract Completion Date
	_____	_____
	Owner/Manager	Telephone
	_____	_____
	Address	Email
	_____	_____
	_____	_____
	_____	_____
1.3.	Account Name	Contract Completion Date
	_____	_____
	Owner/Manager	Telephone
	_____	_____
	Address	Email
	_____	_____
	_____	_____
	_____	_____

2. The Contractor has provided the above services for ____ years. (Note: 5 year minimum)

SECTION G

AFFIDAVIT

Must be completed, signed by an officer of the company (President, CEO, Vice President, etc), and submitted with the bid.

Contractor _____

Address _____

I, _____, the undersigned, _____ of the above named
(Print Signer's Name) (Print Office Held)

Contractor does declare and affirm this _____ day of _____, _____, that I hold the aforementioned office
(Month) (Year)
in the above named Contractor and I affirm the following:

AFFIDAVIT I

The Contractor, his Agent, servants and/or employees, have not in any way colluded with anyone for and on behalf of the Contractor or themselves, to obtain information that would give the Contractor an unfair advantage over others, nor have they colluded with anyone for and on behalf of the Contractor, or themselves, to gain any favoritism in the award of the contract herein.

AFFIDAVIT II

No officer or employee of Howard County, whether elected or appointed, has in any manner whatsoever, any interest in or has received prior hereto or will receive subsequent hereto any benefit, monetary or material, or consideration from the profits or emoluments of this contract, job, work or service for the County, and that no officer or employee has accepted or received or will receive in the future a service or thing of value, directly or indirectly, upon more favorable terms than those granted to the public generally, nor has any such officer or employee of the County received or will receive, directly or indirectly, any part of any fee, commission or other compensation paid or payable to the County in connection with this contract, job, work, or service for the County, excepting, however, the receipt of dividends on corporation stock.

AFFIDAVIT III

Neither I, nor the Contractor, nor any officer, director, or partners, or any of its employees who are directly involved in obtaining contracts with Howard County have been convicted of bribery, attempted bribery, or conspiracy to bribe under the laws of any state, or of the federal government for acts of omissions committed after July 1, 1977.

AFFIDAVIT IV

Neither I, nor the Contractor, nor any of our agents, partners, or employees who are directly involved in obtaining contracts with Howard County have been convicted within the past 12 months of discrimination against any employee or applicant for employment, nor have we engaged in unlawful employment practices as set forth in Section 12.200 of the Howard County Code, or of Section 16 of Article 49B of the Annotated Code of Maryland or, of Sections 703 and 704 of Title VII of the Civil Rights Act of 1964.

AFFIDAVIT V

The Contractor:

- i. Is not currently identified on the list created by the Maryland State Board of Public Works as a person engaging in investment activities in Iran as described in Section 17-702 of the *Maryland State Finance and Procurement Article* ; or
- ii. Is not currently engaging in investment activities in Iran as described in Section 17-702 of the *Maryland State Finance and Procurement Article*.

If the person is unable to make the certification, it will provide the County, a detailed description of the Contractor's investment activities in Iran.

I do solemnly declare and affirm under the penalties of perjury that the contents of the foregoing affidavits are true and correct to the best of my knowledge, information and belief.

Signature

Printed Name

Title

Rev. 09/25/2013

SECTION H**EQUAL BUSINESS OPPORTUNITY PARTICIPATION**
**NOTICE TO PRIME CONTRACTORS
10% SUBCONTRACTING GOAL ON CONTRACTS
VALUED AT \$50,000 OR MORE**

Howard County Code Section 4.122 established an Equal Business Opportunity program to foster overall equity and fairness to all citizens in relation to business enterprises conducting business with the County.

If a contract is \$50,000 or more, the Prime Contractor shall make a good faith effort to comply with the Howard County Equal Business Opportunity (EBO) program's 10% subcontracting goal. The Prime Contractor shall make a good faith effort to obtain minority subcontractor participation even if the Prime Contractor has the capability to complete the work with its own workforce. This is also applicable to Prime Contractors that are minority-owned firms. The percentage requirement may vary. Prime Contractors should submit the following completed *Equal Business Opportunity Subcontractor Participation Form* with the bid. Identify subcontractors prior to submitting the proposal. After contract award, changes in subcontractors require the written approval of the EBO Coordinator.

Possible areas of obtaining subcontracting participation include, but are not limited to, flagging services, hauling, copying and printing, and the purchase of materials used in performing the contract. Contractors may use minority, women or disabled business enterprises certified by Howard County, Maryland; the Maryland Department of Transportation; the City of Baltimore, Maryland; or another certifying entity in order to satisfy the 10% subcontracting goal. The website addresses for lists of minority businesses are:

[Howard County - Equal Business Opportunity List of Firms A-Z](http://www.mdot.state.md.us/MBE_Program/index.html)
http://www.mdot.state.md.us/MBE_Program/index.html
<http://cityservices.baltimorecity.gov/mwboo>

Contractors should submit a completed *Equal Business Opportunity Subcontractor Participation Form* with the bid identifying each certified EBO firm they intend to use on the contract. However, if the EBO Subcontractor Participation Form is not submitted with the bid, the County may request EBO subcontractor participation of the successful contractor.

Contractors failing to achieve the Equal Business Opportunity Program goal following a good faith effort to obtain participation must complete the *Equal Business Opportunity Program Request for Subcontracting Waiver* and provide documentation of its good faith attempts to obtain EBO participation. The County will determine if the efforts made satisfy a good faith attempt. A waiver will only be considered in rare contracts after a determination that the Contractor has made a good faith effort and thoroughly documented the efforts. Contractors should submit the *Equal Business Opportunity Program Request for Subcontracting Waiver* with the bid. However, if the request for waiver form is not submitted with the bid, the County may obtain the request for waiver of the successful contractor.

If the County exercises its option to renew the contract, it is expected that the EBO subcontracting goal will be met for each subsequent contract year when the contract amount is \$50,000.00 or more. Questions relating to the EBO program shall be directed to the EBO Coordinator 410-313-6370.

**PRIME CONTRACTORS' COMPLIANCE OF EBO SUBCONTRACTOR
PARTICIPATION**

Prime Contractors that are awarded County contracts shall maintain adequate records of EBO participation on County contracts. The County may require that prime contractors report whether or not they met the proposed EBO subcontracting goal, so that the County can track compliance of EBO participation on County contracts.

Revised 12/20/2013



HOWARD COUNTY, MARYLAND

EQUAL BUSINESS OPPORTUNITY (EBO)

SUBCONTRACTOR PARTICIPATION FORM

COUNTY USE ONLY

EBO APPROVAL

CONTRACT TITLE: Sewer System Inspection, Cleaning, and Rehabilitation Services

SOLICITATION # 2016-18

CAPITAL PROJECT #N/A

CONTRACT / PO #
TERM:
RENEWAL #
AMOUNT \$
PRIME CONTRACTOR NAME:
ADDRESS:
PHONE:
EBO STATUS (Y/N):
***EBO TYPE:**
CERTIFYING AGENCY:
CERTIFICATION #

PRIME CONTRACTOR SHOULD LIST ALL EBO SUBCONTRACTORS / SUBCONSULTANTS / SUPPLIERS

INSTRUCTIONS FOR COMPLETING THIS FORM

- Complete the section below identifying each certified EBO firm (Minority (MBE), Woman (WBE), and Disabled (DBE) Business Enterprises) you intend to use on this project. Attach additional sheets if more than two (2) subcontractors.
- This form represents the contractor's commitment to utilize the named EBO firms at the percentages indicated should the contract be awarded to the contractor. This form should accompany your bid or proposal.
- ***EBO Types:** AA (African American), ASA (Asian American), HIS (Hispanic American), NA (Native American), FEM (Female), DIS (Disabled)

SUBCONTRACTOR NAME:
ADDRESS:
PHONE:
CONTACT REPRESENTATIVE:
EMAIL:
***EBO TYPE (Check One)**
☐ AA

☐ ASA

☐ HIS

☐ NA

☐ FEM

☐ DIS

CERTIFYING AGENCY:
CERTIFICATION #
EBO PARTICIPATION %
DESCRIPTION OF WORK:
EBO PARTICIPATION \$
SUBCONTRACTOR NAME:
ADDRESS:
PHONE:
CONTACT REPRESENTATIVE:
EMAIL:
***EBO TYPE (Check One)**
☐ AA

☐ ASA

☐ HIS

☐ NA

☐ FEM

☐ DIS

CERTIFYING AGENCY:
CERTIFICATION #
EBO PARTICIPATION %
DESCRIPTION OF WORK:
EBO PARTICIPATION \$

PRINTED NAME

EMAIL

SIGNATURE (VENDOR OFFICIAL)

TITLE

DATE

Revised 12/20/

jmw

SECTION I Information on Howard County, Maryland's Living Wage Requirement

Basics of the Howard County Living Wage Legislation

In 2007, the Howard County Council passed legislation requiring a minimum "living wage" for employees of certain contractors and subcontractors of Howard County. A Contractor that is defined as a "Covered Employer" under Howard County Code Section 4.122A shall pay each employee an hourly rate sufficient to at least equal 125% of the federal poverty guidelines for a family of four individuals calculated on the basis of a 40-hour work week for 52 weeks.

Howard County Code Sec. 4.122A applies to service contracts estimated to be over \$100,000.00 per year. The code does not apply to commodities contracts, contractors who employ fewer than 5 employees during the contract term, public entities, non-profit organizations, or contracts awarded under sole source, emergency, or expedited procedures. Other contractors may also be exempt; see the complete list of exemptions in Section 1 on the front of this form.

The living wage requirements do not apply to an employee:

- who performs no measurable work related to any contract with the County
- who participates in a government-operated or government-sponsored program that restricts the earnings of or wages paid to employees to a level below the wage required under the law
- who participates for not longer than 120 days in a calendar year in a government-operated or government-sponsored summer youth employment program
- for whom a different wage rate is expressly set in a collective bargaining agreement, or
- for whom a higher wage is required by a federal, state, or County law.

This form serves as written certification to the County of your firm's intent to comply with the County's wage requirements during this term and any subsequent renewals. A Covered Employer shall not subdivide a contract; pay an employee through a third party; or treat an employee as a subcontractor or independent Contractor to avoid the imposition of any requirement under this law. Failure to comply with this requirement at any time during the initial term and subsequent renewals may be sufficient cause for termination for default. A violation of this law is a Class A civil offense; in addition to a fine, the County may suspend or debar the violator under Howard County Code Sec. 4.117.

Current Living Wage Rate in Howard County

As of January 26, 2015, the Living Wage Rate is **\$14.57 per hour**.

How the Living Wage Rate is Calculated

The Howard County Living Wage Rate is calculated by taking 125% of the Federal Poverty Guideline for a family of 4, then using this amount to determine the hourly rate based on 40 hours/week. For example, on January 26, 2015, the Federal HHS Poverty Guideline was published as \$24,250 for a family of 4 (see www.aspe.hhs.gov/poverty).

$$125\% \text{ of } \$24,250 = \$30,312.50 \quad \$30,312.50 \div 52 \text{ weeks} \div 40 \text{ hrs/week} = \mathbf{\$14.57 \text{ per hour}}$$

This hourly rate must be paid to employees (full-time or part-time) during the time the employees actually provide services to the County. The current Living Wage remains in effect until new Federal HHS Poverty Guidelines are published next January. If there is a change, the Office of Purchasing will attempt to notify all current contractors via email using the email address provided on this form. The current rate is posted on our website at www.howardcountymd.gov/purchasing. It is the contractor's responsibility to ascertain the current rate.

Since the rate is subject to change annually, you must ensure that your bid pricing is sufficient to cover the cost of any increases during the term of the contract, including subsequent renewals. All prices shall take the current wage rate, and subsequent increases in the wage rate, if any, into account and there shall be no unit price adjustment for future wage rate increases during the initial term of this agreement and any subsequent renewals thereof. Future wage rate increases are hereby defined as any new rates approved by the County that take effect after and supersede the rate shown in this solicitation.

If you have questions about the Living Wage Requirement or how to complete this form, please contact the Office of Purchasing at purchasing@howardcountymd.gov or 410-313-6370.

**Howard County, Maryland Wage Rate Requirements for Service Contracts
Exemption Status Subtitle 1, Howard County Code Section 4.122A(b)(2)**

Prime Contr. Sub-Contr.	Section 1: Exemptions	Check all that apply, then continue to Section 2. If none of these statements apply to your company or the Subcontractor, check the last box in this section and continue to Section 2.
<input type="checkbox"/>	<input type="checkbox"/>	Contractor or Subcontractor employs fewer than 5 employees at any time during the contract term.
<input type="checkbox"/>	<input type="checkbox"/>	Contractor or Subcontractor received less than \$100,000 from the County in the most recent 12-month period prior to the start date, and will be entitled to receive less than \$100,000 from the County within the next 12-month period.
<input type="checkbox"/>	<input type="checkbox"/>	Contractor or Subcontractor is a nonprofit organization that has qualified for an exemption from federal income taxes under Section 501(c)(3) of the Internal Revenue Code.
<input type="checkbox"/>	<input type="checkbox"/>	Contractor or Subcontractor is expressly precluded from complying with Howard County Code Sec. 4.122A by the terms of any federal, state, or County law, federal or state contract or grant, and the contract falls within that preclusion.
<input type="checkbox"/>	<input type="checkbox"/>	Contractor or Subcontractor is a public entity.
<input type="checkbox"/>	<input type="checkbox"/>	Contractor or Subcontractor participates in a contract awarded under Howard County Code Secs. 4.110 (Sole Source), 4.111 (Emergency), or 4.112 (Expedited).
<input type="checkbox"/>	<input type="checkbox"/>	Contractor or Subcontractor is a regulated public utility.
<input type="checkbox"/>	<input type="checkbox"/>	Contract was awarded under a cooperative procurement with another government or organization of governments.
Check here <input type="checkbox"/> if none of the above statements are applicable to your company or to the Subcontractor, then continue to Section 2.		

Section 2: Certifications	<ul style="list-style-type: none"> • If you checked any exemptions in Section 1, skip this section and continue to Section 3. • If you did not check any exemptions in Section 1, check each box in Section 2 that applies to your company, then complete Section 3 below.
--------------------------------------	--

I do hereby certify that I have read and understand the provisions of Section 4.122A of the Howard County Code, that I am an authorized representative of the Contractor named below, and that:

- ☐ As a "covered employer," the Contractor and all Subcontractors will comply with the County's Wage Rate Requirements for Service Contracts (Howard County Code Sec. 4.122A) and will pay all employees not exempt under the wage requirements, and who perform direct measurable work for the County, the applicable wage requirements at the time the work is performed. The Contractor will keep the records necessary to show compliance and will submit such records to the Purchasing Agent on request of the Purchasing Agent; and will publicize the requirements of this law to any employees who may be covered by the law. The Contractor's proposed pricing is sufficient to meet the current living wage rate requirements during the initial term of the agreement and any increases applicable to subsequent renewals.
- ☐ **If health insurance is provided to employees**, the per employee hourly cost of the premium for health insurance to an employee who provides services to the County that appears in the bid or proposal is correct.

Section 3: Contact Information	Provide your contact information in the space below, then sign and date this form and submit it with your bid.
---	--

Contractor Name _____	Vendor Federal ID Number _____
Address _____	Phone Number _____
_____	Email Address _____
Authorized Signature _____	Date _____
Print Name of Signatory _____	Title of Signatory _____

Office of Purchasing Use Only	Contract Title: Sewer System Inspection, Cleaning, and Rehabilitation Services		Buyer's Initials: jmw
	Contract No:	Renewal No.	
	Capital Project No:	Contract Term:	

EXHIBIT I HOWARD COUNTY, MARYLAND AGREEMENT

THIS AGREEMENT made by and between Howard County, Maryland [as Purchasing Agent For Howard County Health Department, remove if not applicable], a body corporate and politic, (the "County") and [NAME AND ADDRESS OF CONTRACTOR], [Federal Employer Identification Number _____, Telephone Number _____] (the "Contractor").

WHEREAS, the said Contractor, in consideration of the payments hereinafter specified and agreed to be made by said County, hereby covenants and agrees to [perform all services] [provide all goods], in strict and entire conformity with the Attachment A entitled, ["Services to be Performed"] ["Goods To Be Provided"], [and] any [Services Agreement, Commodities Agreement, or Purchase Order] subsequently issued and the [Invitation for Bid/Request for Proposal] No. _____ TITLE OF IFB/RFP and the response and any amendments or revisions thereto (collectively, the "Bid") attached hereto and incorporated herein.

NOW THEREFORE, in consideration of the mutual promises and covenants, the parties hereto agree that the County shall pay the Contractor, an amount as set forth herein, for [services rendered][goods provided] in accordance with this Agreement, the other attachments hereto [and if applicable, the Bid] and the Purchase Order all of which are hereby incorporated into and made a part of this Agreement. Notwithstanding any other terms or provisions of this Agreement, in the event the County is temporarily or permanently prevented, restricted or delayed in the performance of any or all of the duties and obligations imposed upon or assumed by it hereunder, by act of the General Assembly of Maryland or the Howard County Council, by a court of competent jurisdiction or by administrative delay not due to the fault of the County (and its members and agents), the County shall not be liable directly or indirectly for any claims caused to or suffered by the Contractor or any other person in connection with or as a result of such prevention, restriction or delay. In addition the parties hereto agree as follows:

1. Contractor's Duties.

The Contractor shall be an independent Contractor and not an employee of the County and the Contractor's employees who are assigned to provide services to the County under this Agreement shall be employees of the Contractor and not the County. The Contractor shall be responsible for the reporting and remittance of all state and federal taxes, compensable workers' compensation claims and coverage of unemployment claims filed by its employees. The Contractor shall [perform the services] [provide the goods] outlined in Attachment A hereto. The Contractor's [services] [goods] will be provided with due care and in accordance with all applicable standards. The Contractor shall [perform the services][provide the goods] for the _____ of the County, or Designee, who shall have authority to administer the Agreement.

2. Compensation.

2.1 In consideration of the [services][goods] to be provided by the Contractor, the County shall pay the Contractor

Select one of the following options: (These may be modified to fit a particular Agreement; they are just starting points for sample Agreement language.)

- in accordance with the unit prices set forth in the [Bid] [Proposal].
- in accordance with the [fee schedule] [unit prices] attached hereto as Attachment A. *(or some other attachment – B, C, D, etc.)*
- the sum of _____ Dollars (\$____) *(This one is usually used for firm fixed price Agreements with a lump sum, one time payment.)*
- an hourly rate of \$_____ per hour for an approximate total of ____ hours and shall reimburse the Contractor for eligible expenses incurred by the Contractor in the performance of the Contractor's responsibilities and obligation under this Agreement. The eligible expenses are set forth in Attachment A.
- an amount equal to 90% of the amount invoiced pursuant to Paragraph 2.2 below. Ten percent (10%) of each disbursement shall be retained by the County and disbursed in a lump sum upon [completion of the services described herein][delivery of the goods described herein] in a manner satisfactory to the County, in its sole discretion. *(This one is usually used for software purchases for retainage.)*

2.2 The Contractor shall submit invoices to the County [SELECT ONE OF THE FOLLOWING OPTIONS: [monthly] [quarterly] [insert another time period for submission of invoices]. The Contractor's invoices shall reflect the:

- 2.2.1 Contractor's name
- 2.2.2 Address

- 2.2.3 Federal tax identification number
- 2.2.4 Contract number (the first two digits are 44XXXXXXXX)
- 2.2.5 Purchase Order number the first two digits are 2XXXXXXXXX
- 2.2.6 Contract line number
- 2.2.7 Unit price and extended (the unit price must match a line on the Contract)
- 2.2.8 Description of goods provided and/or services performed.

2.3 The proper form of County invoices requires that the information enumerated above be included on all invoices. In order to facilitate prompt payment, invoice must contain the prescribed information.

2.4 All invoices shall be submitted in triplicate to DEPARTMENT NAME AND ADDRESS. Invoices in the proper form and approved by the County shall be paid by the Company within 30 days of receipt thereof.

2.5 Invoices failing to contain the information enumerated above may be returned for correction. The County reserves the right to approve such invoices, in its sole discretion, and to request such detail and additional information as the County, in its discretion deems appropriate.

3. Term.

3.1 This Agreement shall be effective

Select one of the following options:

- _____, 20____ [Insert Date – spelled out]
- as of the date above written
- when it has been properly signed by all parties hereto
- when executed by Howard County

and shall continue through [Insert Date – spelled out] [, at which time the County may exercise its option to renew set forth in Paragraph 3.2 below], unless sooner terminated pursuant to Paragraphs 5 and 7 hereof. [Insert for true requirements contract when more than 12 months – This Agreement is a requirements contract (indefinite delivery indefinite quantity contract) and does not require the payment of funds from appropriations of a later fiscal year.]

3.2 The County reserves the right to renew this Agreement for [insert renewal period] on the same terms and conditions set forth herein. [INSERT ANY CHANGES TO THE TERMS, i.e. COMPENSATION, UPON RENEWAL OF AGREEMENT, OTHERWISE, IT MUST BE RENEWED ON THE SAME TERMS AND CONDITIONS] Unless set forth in a written amendment, the compensation [, reimbursement] and manner of payment set forth in Paragraph 2 shall remain as is. In the event any renewal changes the terms and conditions set forth herein, the approval of the Howard County Council may be required.

4. Contractor's Representations and Warranties. The Contractor hereby represents the following:

4.1 [USE FOR CORPORATIONS, LIMITED OR GENERAL PARTNERSHIPS OR LIMITED LIABILITY COMPANIES; DELETE IF CONTRACTOR IS AN INDIVIDUAL] The Contractor is a [corporation][limited partnership][general partnership][limited liability company], duly formed and validly existing under the laws of the State of [INSERT STATE OF INCORPORATION] and is qualified to do business and is in good standing in the State of Maryland.

4.2 [USE FOR CORPORATIONS, LIMITED OR GENERAL PARTNERSHIPS OR LIMITED LIABILITY COMPANIES; DELETE IF CONTRACTOR IS AN INDIVIDUAL] The Contractor has the power and authority to consummate the obligations and responsibilities contemplated hereby, and has taken all necessary action to authorize the execution, delivery and performance required under this Agreement.]

4.3 The person executing this Agreement for the Contractor warrants that [he / she] is duly authorized by the Contractor to execute this Agreement on the Contractor's behalf.

4.4 SELECT ONE OF THE FOLLOWING OPTIONS: A. [The services to be provided under this Agreement shall be performed competently and with due care, and in accordance with all applicable laws, codes, ordinances and regulations and licensing requirements.] OR B. [The goods to be delivered shall comply with the implied warranties of merchantability and fitness for use, and all express warranties created by this Agreement.]

4.5 The Contractor has obtained and shall continue to maintain, at its own cost, such licenses and certifications as are necessary to provide the services rendered under this Agreement, and shall present such licenses to the County upon its request for the same.

4.6 All representations and warranties made in the Affidavit [and the Bid response] remain true and correct in all respects.

5. Termination:

5.1 Termination for Convenience: The County may terminate this Agreement, in whole or in part, whenever the County determines that such termination is in the best interest of the County, without showing cause, upon giving at least 30 days written notice to the Contractor. The County shall pay all reasonable costs incurred by the Contractor up to the date of termination. However, in no event shall the Contractor be paid an amount which exceeds the price bid for the work performed. The Contractor shall not be reimbursed for any profits which may have been anticipated but which have not been earned up to the date of termination.

5.2 Termination for Default: When the Contractor has not performed or has unsatisfactorily performed one or more material terms of the Agreement, the County may terminate the Agreement for default. Upon termination for default, payment may be withheld at the discretion of the County. Failure on the part of a Contractor to fulfill the contractual obligations of this Agreement shall be considered just cause for termination of the Agreement. If the damages exceed the undisbursed sums available for compensation, the County shall not be obligated to make any further disbursements hereunder. The Contractor will be paid for work satisfactorily performed prior to termination less any excess costs incurred by the County in reprocurring and completing the work.

6. Remedies for Default.

6.1 The County shall have the right upon the happening of any Default, without providing notice to the Contractor:

- a. In addition to other available rights and remedies, to terminate this Agreement immediately, in whole or in part;
- b. To suspend the Contractor's authority to receive any undisbursed funds; and/or
- c. To proceed at any time or from time to time to protect and enforce all rights and remedies available to the County, by suit or any other appropriate proceedings, whether for specific performance of any covenant, term or condition set forth in this Agreement, or for damages or other relief, or proceed to take any action authorized or permitted under applicable law or regulations.

6.2 Upon termination of this Agreement for default, the County may elect to pay the Contractor for [services provided] [goods delivered] up to the date of termination, less the amount of damages caused by the default. If the damages exceed the undisbursed sums available for compensation, the County shall not be obligated to make any further disbursements hereunder.

7. Remedies Cumulative and Concurrent.

No remedy herein conferred upon or reserved to the County is intended to be exclusive of any other remedies provided for in this Agreement, and each and every such remedy shall be cumulative, and shall be in addition to every other remedy given hereunder, or under this Agreement, or now or hereafter existing at law or in equity or by statute. Every right, power and remedy given to the County shall be concurrent and may be pursued separately, successively or together against the Contractor, and every right, power and remedy given to the County may be exercised from time to time as often as may be deemed expedient by the County.

8. Insurance.

10.9 The Contractor shall be required to provide insurance required by the County pursuant to the insurance requirements specified in the Invitation for Bid including naming. "Howard County, Maryland, its officials, employees, agents and volunteers" as Certificate Holder and as Additional Insured. The Contractor shall maintain the insurance coverages required by the County while this Agreement is in force, and provide documentation of such insurance in a form satisfactory to the County. Such documentation may, in the discretion of the County, be in the form of binders or declarations from the insurance company.

9. Confidential Information.

The Contractor shall not disclose any documentation and information disclosed to the Contractor in the course of its performance of duties hereunder with respect to the past, present and future County business, services and clients without the express written consent of the County.

10. Ethics.

10.1 The Contractor certifies that the officer of the corporation who is executing this Agreement has read and understands Attachment B, entitled Howard County Charter and Code References to Ethics, which contains the provisions of Section 901(a) of the Howard County Charter dealing with conflicts of interest and Section 22.204 of the Howard County Code dealing with conflicts of interest.

10.2. The Contractor certifies that he/she has (1) not been a party to an agreement to bid a fixed or uniform price; (2) not offered nor will offer any gratuity to any county official or employee; and (3) not violated any of the fair employment provisions of Code Sec. 4.119 Ethics and Fair Employment Practices detailed in Attachment B.

11. Assignment.

Neither the County nor the Contractor shall assign, sublet or transfer its interest or obligations under this Agreement to any third party, without the written consent of the other. Nothing herein shall be construed to create any personal or individual liability upon any

employee, officer or elected official of the County, nor shall this Agreement be construed to create any rights hereunder in any person or entity other than the parties of this Agreement.

12. Delegation of Duties.

The Contractor shall not delegate the Contractor's duties under this Agreement without the prior written consent of the County.

13. Indemnification.

13.1 The Contractor shall indemnify and hold harmless the County, its employees, agents and officials from any and all claims, losses or expenses resulting from any accidents, injuries or damages to persons or property, suits, or demands including reasonable attorney fees which may be made against the County, its employees, agents or officials resulting from any act or omission committed in the performance of the duties imposed by and performed under the terms of this Agreement by the Contractor or anyone under agreement with the Contractor to perform duties under this Agreement.

13.2 Any property or work to be provided by the Contractor under this Agreement will remain at the Contractor's risk until written acceptance by the County; and the Contractor will replace, at the Contractor's expense, all property or work damaged or destroyed by any cause whatsoever.

13.3 In the event that there is a conflict between the indemnification provision set forth in the Purchase Order Terms and Conditions and/or the General Conditions of the solicitation and/or this Agreement, the terms set forth in the Agreement shall govern.

14. Integration and Modification.

This Agreement sets forth the entire agreement between the parties relative to the subject matter hereof. No representation, promise or condition, whether oral or written, not incorporated herein shall be binding upon either party to this Agreement. No waiver, modification or amendment of the terms of this Agreement shall be effective unless made in writing and signed by an authorized representative(s) of the party sought to be bound thereby.

15. Governing Law.

This Agreement shall be governed by and construed in accordance with the laws of the State of Maryland without regard to any choice of law principles that would dictate the laws of any other jurisdiction. The parties agree that the exclusive venue for any and all actions related hereto shall be the appropriate Federal or State court located within the State of Maryland.

16. Conflicting Terms.

[16.1] The Contractor acknowledges that any Purchase Order issued on or after the effective date of this Agreement is hereby integrated and made a part of this Agreement, provided, however that if a conflict arises between the provisions of this Agreement and the Purchase Order, the provisions of this Agreement shall prevail.

[16.2] In the event of a conflict between the Bid and this Agreement, the provisions of this Agreement (without the conflicting terms in the Bid) shall prevail.

17. Severability.

If any of the provisions in this Agreement are declared by a court or other lawful authority to be unenforceable or invalid for any reason the remaining provisions hereof shall not be affected thereby and shall remain enforceable to the full extent permitted by law.

18. Time is of the Essence.

Time is of the essence with respect to performance of the terms and conditions of this Agreement.

19. Funding.

The contractual obligation of the County under this Agreement is contingent upon the availability of appropriated funds from which payment for this Agreement can be made.

[DELETE IF NOT APPLICABLE] 20. Ownership of Goods.

All finished or unfinished work, reports, or goods that are the subject of this Agreement [DELETE IF NOT APPLICABLE:] including any licenses or consents acquired by the Contractor for performance hereunder,] shall be and shall remain the property of the County.]

21. Notice.

Any notice required to be delivered shall be deemed to have been received when the notice has been sent by certified mail, return receipt, overnight carrier, or hand delivered to the following address and individual or at such other address and/or such other individual a party may identify in writing to the other party:

[Make it a sentence or column, depending on space available]

FOR THE COUNTY:

_____, Buyer
Howard County, Maryland
Office of Purchasing
6751 Columbia Gateway Drive, Suite 501
Columbia, MD 21046
Telephone: (410) 313-_____
Fax: (410) 313-6388
Email: _____@howardcountymd.gov

FOR THE CONTRACTOR:

[Contact Name, Company,
Address, Telephone, Fax, E-mail]

[DELETE IF NOT APPLICABLE]: 22.

HIPAA. Compliance With Federal HIPAA And State Confidentiality Law.

A. The Contractor acknowledges its duty to become familiar with and comply, to the extent applicable, with all requirements of the federal Health Insurance Portability and Accountability Act (HIPAA), 42 U.S.C. §§ 1320 *et seq.* and implementing regulations including 45 CFR Parts 160 and 164. The Contractor also agrees to comply with the Maryland Confidentiality of Medical Records Act (Md. Code Ann. Health-General §§4-301 *et seq.*, MCMRA). This obligation includes:

1. As necessary, adhering to the privacy and security requirements for protected health information and medical records under federal HIPAA and State MCMRA and making the transmission of all electronic information compatible with the federal HIPAA requirements; and

2. Providing good management practices regarding all health information and medical records.

B. The County has determined that functions to be performed constitute business associate functions as defined in HIPAA, therefore, contractor must execute a business associate agreement as required by HIPAA regulations at 45 CFR §164.501 included as Attachment C. If the County determines that the contractor has not provided the HIPAA agreement required by this solicitation, the Purchasing Agent, upon review of the Howard County Office of Law, may withdraw the recommendation for award and make the award to the next qualified offeror.

C. Protected Health Information as defined in the HIPAA regulations at 45 CFR 160.103 and 164.501, as amended from time to time, means information transmitted as defined in the regulations, that is individually identifiable; that is created or received by a healthcare provider, health plan, public health authority, employer, life insurer, school or university, or healthcare clearinghouse; and that is related to the past, present, or future physical or mental health or condition of an individual, to the provision of healthcare to an individual, or to the past, present, or future payment for the provision of healthcare to an individual. The definition excludes certain education records as well as employment records held by a covered entity in its role as employer.

23. No Waiver, Etc.

No failure or delay by the County to insist upon the strict performance of any term, condition or covenant of this Agreement, or to exercise any right, power, or remedy consequent upon a breach thereof, shall constitute a waiver of any such term, condition, or covenant or of any such breach, or preclude the County from exercising any such right, power, or remedy at any later time or times.

[SPECIAL CLAUSES HERE, SUCH AS WARRANTIES, LIQUIDATED DAMAGES ETC.]

WITNESS:

[INSERT LEGAL NAME OF CONTRACTOR]

Signature

By: _____
[Insert Name]
[Insert Title]

Print Name : _____

WITNESS:

HOWARD COUNTY, MARYLAND, a body
corporate and politic

Lonnie R. Robbins
Chief Administrative Officer

applicable)

By: _____
Allan H. Kittleman
County Executive
Purchasing Agent For Howard County Health Department, (remove if not

APPROVED FOR LEGAL SUFFICIENCY
this _____ day of _____, 2014:

INFORMATION TECHNOLOGY APPROVED:

Margaret Ann Nolan
County Solicitor

Christopher Merton (IF APPLICABLE)
Chief Information Officer
Technology & Communication Services

REVIEWING ATTORNEY:

Type Name: _____
Title: _____

APPROVED FOR SUFFICIENCY OF FUNDS:

DEPARTMENT APPROVED:

Stanley J. Milesky
Director of Finance

[Insert Dept. Head Name]
[Insert Title]

ATTACHMENT A
SERVICES TO BE PERFORMED

The above are in addition to any other services set forth in the Bid.

sample

ATTACHMENT B

HOWARD COUNTY CHARTER AND CODE REFERENCES TO ETHICS

Charter Section 901. Conflict of Interest.

(a) **Prohibitions.** No officer or employee of the County, whether elected or appointed, shall in any manner whatsoever be interested in or receive any benefit from the profits or emoluments of any contract, job, work, or service for the County. No such officer or employee shall accept any service or thing of value, directly or indirectly, from any person, firm or corporation having dealings with the County, upon more favorable terms than those granted to the public generally, nor shall he receive, directly or indirectly, any part of any fee, commission or other compensation paid or payable by the County, or by any person in connection with any dealings with the County, or by any person in connection with any dealings with or proceedings before any branch, office, department, board, commission or other agency of the County. No such officer or employee shall directly or indirectly be the broker or agent who procures or receives any compensation in connection with the procurement of any type of bonds for County officers, employees or persons or firms doing business with the County. No such officer or employee shall solicit or accept any compensation or gratuity in the form of money or otherwise for any act or omission in the course of his public work; provided, however, that the head of any department or board of the County may permit an employee to receive a reward publicly offered and paid for, for the accomplishment of a particular task.

(b) **Rules of construction; exceptions by Council.** The provisions of this Section shall be broadly construed and strictly enforced for the purpose of preventing officers and employees from securing any pecuniary advantages, however indirect, from their public associations, other than their compensation provided by law.

In order, however, to guard against injustice, the Council may, by resolution, specifically authorize any County officer or employee to own stock in any corporation or to maintain a business in connection with any person, firm or corporation dealing with the County, if, on full public disclosure of all pertinent facts to the County Council by such officer or employee, the Council shall determine that such stock ownership or connection does not violate the public interest.

The County Council may, by ordinance, delegate to the Howard County Ethics Commission the power to make such determinations and to authorize the ownership or connection. Any ordinance which delegates this power shall provide for procedures including a public hearing, and shall establish criteria for determining when the ownership or connection does not violate the public interest.

(c) **Penalties.** Any officer or employee of the County who willfully violates any of the provisions of this Section shall forfeit his office. If any person shall offer, pay, refund or rebate any part of any fee, commission, or other form of compensation to any officer or employee of the County in connection with any County business or proceeding, he shall, on conviction, be punishable by imprisonment for not less than one or more than six months or a fine of not less than \$100.00 or more than \$1,000.00, or both. Any contract made in violation of this Section may be declared void by the Executive or by resolution of the Council. The penalties in this Section shall be in addition to all other penalties provided by law.

Code Section 4.119. Ethics and Fair Employment Practices.

(a) **Conflict of Interest.** Bidders, vendors, purchasers and county employees involved in the purchasing process shall be governed by the provisions of the Howard County Charter and Howard County law regarding conflict of interest. No vendor shall offer a gratuity to an official or employee of the county. No official or employee shall accept or solicit a gratuity.

(b) **Discouragement of Uniform Bidding.**

(1) It is the policy of the county to discourage uniform bidding by every possible means and to endeavor to obtain full and open competition on all purchases and sales.

(2) No bidder may be a party with other bidders to an agreement to bid a fixed or uniform price.

(3) No person may disclose to another bidder, nor may a bidder acquire, prior to the opening of bids, the terms and conditions of a bid submitted by a competitor.

(c) **Fair Employment Practices**

(1) Bidders, vendors and purchases may not engage in unlawful employment practices as set forth in Subtitle 2 "human Rights" of Title 12 of the Howard County Code Section 14 of Article 49B of the Annotated Code of Maryland or Sections 703 and 704 of Title VII of the Civil Rights Act of 1964 as amended. Should any bidders, vendors or purchasers engage in such unlawful employment practices, they shall be subject to being declared irresponsible or being debarred pursuant to the provisions of this subtitle.

(2) The Howard County Office of Human Rights shall notify the county purchasing agent when any bidder is found, by a court of competent jurisdiction, to have engaged in any high unlawful employment practices.

(3) If any bidder has been declared to be an irresponsible bidder for having engaged in an unlawful employment practice and has been debarred from bidding pursuant to this subtitle, the Howard County Office of Human Rights shall review the employment practices of such bidder after the period of debarment has expired to determine if violations have been corrected and shall, within 30 days, file a report with the county purchasing agent informing the agent of such corrections before such bidder can be declared to be a responsible bidder by the County Purchasing agent.

(4) Payment of subcontractors. All contractors shall certify in writing that timely payments have been made to all subcontractors supplying labor and materials in accordance with the contractual arrangements made between the contractor and the subcontractors. No contractor will be paid a second or subsequent progress payment or final payment until such written certification is presented to the county purchasing agent.

Code Section 22.204. - Prohibited Conduct and Interests.

(a) **Participation Prohibitions.**

- (1) Except as permitted by Commission regulation or opinion, an official or employee may not participate in:
 - (i) Except in the exercise of an administrative or ministerial duty that does not affect the disposition or decision of the matter, any matter in which, to the knowledge of the official or employee, the official or employee or a qualified relative of the official or employee has an interest.
 - (ii) Except in the exercise of an administrative or ministerial duty that does not affect the disposition or decision with respect to the matter, any matter in which any of the following is a party:
 - a. A business entity in which the official or employee has a direct financial interest of which the official or employee may reasonably be expected to know;
 - b. A business entity for which the official, employee, or a qualified relative of the official or employee is an officer, director, trustee, partner, or employee;
 - c. A business entity with which the official or employee or, to the knowledge of the official or employee, a qualified relative is negotiating or has any arrangement concerning prospective employment;
 - d. If the contract reasonably could be expected to result in a conflict between the private interests of the official or employee and the official duties of the official or employee, a business entity that is a party to an existing contract with the official or employee, or which, to the knowledge of the official or employee, is a party to a contract with a qualified relative;
 - e. An entity, doing business with the County, in which a direct financial interest is owned by another entity in which the official or employee has a direct financial interest, if the official or employee may be reasonably expected to know of both direct financial interests; or
 - f. A business entity that:
 1. The official or employee knows is a creditor or obligee of the official or employee or a qualified relative of the official or employee with respect to a thing of economic value; and
 2. As a creditor or obligee, is in a position to directly and substantially affect the interest of the official or employee or a qualified relative of the official or employee.
- (2) A person who is disqualified from participating under paragraph 1. of this subsection shall disclose the nature and circumstances of the conflict and may participate or act if:
 - (i) The disqualification leaves a body with less than a quorum capable of acting;
 - (ii) The disqualified official or employee is required by law to act; or
 - (iii) The disqualified official or employee is the only person authorized to act.
- (3) The prohibitions of paragraph 1 of this subsection do not apply if participation is allowed by regulation or opinion of the Commission.

(b) **Employment and Financial Interest Restrictions.**

- (1) Except as permitted by regulation of the commission when the interest is disclosed or when the employment does not create a conflict of interest or appearance of conflict, an official or employee may not:
 - (i) Be employed by or have a financial interest in any entity:
 - a. Subject to the authority of the official or employee or the County agency, board, commission with which the official or employee is affiliated; or
 - b. That is negotiating or has entered a contract with the agency, board, or commission with which the official or employee is affiliated; or
 - (ii) Hold any other employment relationship that would impair the impartiality or independence of judgment of the official or employee.
- (2) The prohibitions of paragraph (1) of this subsection do not apply to:
 - (i) An official or employee who is appointed to a regulatory or licensing authority pursuant to a statutory requirement that persons subject to the jurisdiction of the authority be represented in appointments to the authority;
 - (ii) Subject to other provisions of law, a member of a board or commission in regard to a financial interest or employment held at the time of appointment, provided the financial interest or employment is publicly disclosed to the appointing authority and the Commission;
 - (iii) An official or employee whose duties are ministerial, if the private employment or financial interest does not create a conflict of interest or the appearance of a conflict of interest, as permitted and in accordance with regulations adopted by the Commission; or
 - (iv) Employment or financial interests allowed by regulation of the Commission if the employment does not create a conflict of interest or the appearance of a conflict of interest or the financial interest is disclosed.

(c) **Post-Employment Limitations and Restrictions.**

- (1) A former official or employee may not assist or represent any party other than the County for compensation in a case, contract, or other specific matter involving the County if that matter is one in which the former official or employee significantly participated as an official or employee.

(2) For a year after the former member leaves office, a former member of the County Council may not assist or represent another party for compensation in a matter that is the subject of legislative action.

(d) **Contingent Compensation.** Except in a judicial or quasi-judicial proceeding, an official or employee may not assist or represent a party for contingent compensation in any matter before or involving the County.

(e) **Use of Prestige of Office.**

(1) An official or employee may not intentionally use the prestige of office or public position for the private gain of that official or employee or the private gain of another.

(2) This subsection does not prohibit the performance of usual and customary constituent services by an elected official without additional compensation.

(f) **Solicitation and Acceptance of Gifts.**

(1) An official or employee may not solicit any gift.

(2) An official or employee may not directly solicit or facilitate the solicitation of a gift, on behalf of another person, from an individual regulated lobbyist.

(3) An official or employee may not knowingly accept a gift, directly or indirectly, from a person that the official or employee knows or has the reason to know:

- (i) Is doing business with or seeking to do business with the County office, agency, board or commission with which the official or employee is affiliated;
- (ii) Has financial interests that may be substantially and materially affected, in a manner distinguishable from the public generally, by the performance or nonperformance of the official duties of the official or employee;
- (iii) Is engaged in an activity regulated or controlled by the official's or employee's governmental unit; or
- (iv) Is a lobbyist with respect to matters within the jurisdiction of the official or employee.

- (4) (i) Subsection (4)(ii) does not apply to a gift:
 - a. That would tend to impair the impartiality and the independence of judgment of the official or employee receiving the gift;
 - b. Of significant value that would give the appearance of impairing the impartiality and independence of judgment of the official or employee; or
 - c. Of significant value that the recipient official or employee believes or has reason to believe is designed to impair the impartiality and independence of judgment of the official or employee.
- (ii) Notwithstanding paragraph (3) of this subsection, an official or employee may accept the following:
 - a. Meals and beverages consumed in the presence of the donor or sponsoring entity;
 - b. Ceremonial gifts or awards that have insignificant monetary value;
 - c. Unsolicited gifts of nominal value that do not exceed \$20.00 in cost or trivial items of informational value;
 - d. Reasonable expenses for food, travel, lodging, and scheduled entertainment of the official or the employee at a meeting which is given in return for the participation of the official or employee in a panel or speaking engagement at the meeting;
 - e. Gifts of tickets or free admission extended to an elected official to attend a charitable, cultural, or political event, if the purpose of this gift or admission is a courtesy or ceremony extended to the elected official's office;
 - f. A specific gift or class of gifts that the Commission exempts from the operation of this subsection upon a finding, in writing, that acceptance of the gift or class of gifts would not be detrimental to the impartial conduct of the business of the County and that the gift is purely personal and private in nature;
 - g. Gifts from a person related to the official or employee by blood or marriage, or any other individual who is a member of the household of the official or employee; or
 - h. Honoraria for speaking to or participating in a meeting, provided that the offering of the honorarium is not related, in any way, to the official's or employee's official position.

(g) **Disclosure of Confidential Information.** Other than in the discharge of official duties, an official or employee may not disclose or use confidential information, that the official or employee acquired by reason of the official's or employee's public position and that is not available to the public, for the economic benefit of the official or employee or that of another person.

(h) **Participation in Procurement.**

(1) An individual or a person that employs an individual who assists a County, agency or unit in the drafting of specifications, an invitation for bids, or a request for proposals for a procurement, may not submit a bid or proposal for that procurement, or assist or represent another person, directly or indirectly, who is submitting a bid or proposal for the procurement.

(2) The Commission may establish exemptions from the requirements of this section for providing descriptive literature, sole source procurements, and written comments solicited by the procuring agency.

**EXHIBIT II
SAMPLE INVOICE**

Your Company's Name

Address

[Email address](#)

Telephone/Fax Nos.

Mail Invoice To:

Howard County Government

Department/Office Name

Address (From the Purchase Order)

Address

Invoice No.:

Date:

FEIN:

Contract #: 44XXXXXXXXX

Purchase Order #: 2XXXXXXXXXX

Performance Period: __/__/13-__/__/14
(For Services)

Cont. Line #	PO Item #	Goods/Services Description	List Price	% Discount	Net Price	Quantity	Extended Price
Total							

Payment Terms:

Please make check payable to ***Your Company's Name*** and remit payment to:

Your Company's Name

Address

Address

If you have any questions regarding this invoice, please contact

Your Company's Contact Person's Name at ***Telephone No.*** and ***Email Address.***